

# Threemile Restoration and Resiliency Project

## Forest Service Response: to Comments

On October 4, 2017, a scoping document was mailed to 40 potentially affected, businesses, federal, state and local agencies, tribes and special interest groups. The document contained the detailed proposed action, maps, and methods for participation. The scoping documents were published to the Custer Gallatin National Forest web page in October 2017, when scoping started. The Forest's web page is also linked to the Forest's schedule of proposed actions. The mailing list is included in the project record. The Ashland District Ranger and Team Leader met with county commissioners from Rosebud and Powder River Counties, Montana. Five entities responded to the scoping. While no significant issues were raised, the Forest Service decided to develop Alternative B – Modified Proposed Action to respond to preliminary analysis and in part to public comment.

The Environmental Assessment (EA) for the Threemile Restoration and Resiliency Project was made available for review for two 30 day notice and comment periods. The first legal notice was published on October 26, 2018. On October 30, the Forest Service was notified by Dick Artley via email asking if the email address for comments was correct as it was prefaced by an FS [comments-northern-custer-ashland@fs.fed.us](mailto:comments-northern-custer-ashland@fs.fed.us) and Mr. Artley had not seen the email address identified in that way before. We quickly corrected the legal notice with the proper email address and that legal notice was published in the paper of record on November 2, 2018. The second time the Threemile Restoration and Resiliency Project EA was made available for 30 day notice and comment because the legal notice announcing the November 2 to December 3 comment period was not posted to the Forest's web page within the statutorily required four days after publication in the Billings Gazette. Therefore, the EA was being made available, again, for 30 day notice and comment period, and the legal notice was published to the project web page within the designated timeframe. We notified commenters that any comments submitted during the November 2 to December 3, 2018 comment period did not have to be re-submitted and would be included as part of the record. This second comment period closed January 7, 2019. This happened to be during the shutdown of the federal government. No comments were received during, or after, that time frame seeking additional time to comment because of the shutdown.

1. Eli Shuford. Belgrade, MT.
  - *Expressed support for the Threemile Restoration and Resiliency Project. Concerns addressed and summarized in the Forest Service Response to Comments below*
2. Northern Cheyenne Tribal Historic Preservation Office. Teanna Limpy, Northern Cheyenne Tribal Historic Preservation Officer.
  - *Requesting face to face consult. Concerns addressed and summarized in the Forest Service Response to Comments below.*
2. Marian Hanson. Permittee. Ashland, MT.
  - *Expressed support for the Threemile Restoration and Resiliency project. Concerns addressed and summarized in the Forest Service Response to Comments below.*
3. Harold Hanson. Permittee. Ashland, MT.
  - *Expressed support for the Threemile Restoration and Resiliency project. Concerns addressed and summarize in Forest Service Response to Comments below*
4. Dick Artley. Grangeville, ID.
  - *Notified Forest Service that the email address for submitting comments needed to be corrected. This issue is addressed and summarized in the Forest Service Response to Comments below.*
  - *Mr. Artley's 11/10/2018 comments are addressed in a separate response to comments document contained in the project record.*
5. MT Fish, Wildlife & Parks. Ryan DeVore, Wildlife Biologist, Broadus District, Boyes, MT.
  - *Expressed support for the Threemile Restoration and Resiliency project. Concerns addressed and summarize in Forest Service Response to Comments below.*
6. Native Ecosystems Council (NEC) (Sara Jane Johnson) and Alliance for the Wild Rockies (AWR) (Michael Garritty)
  - *Concerns addressed and summarized in Forest Service Response to Comments below.*

Comments received were sorted by commenter and the public comment period in which comments were received. Where possible, subject matter, and similar items were grouped together for a single Forest Service Response. However, some scoping comments are numerically out-of-order because the response to these comments was combined with the response to the October 26, 2018 EA comments. Forest Service responses to these comments are discussed below. Response to comments submitted by Mr. Artley in his November 10, 2018 are addressed in a separate document in the project record.

<b>Commenter Name</b>	<b>Organization</b>	<b>Public Comment Period - Scoping</b>	<b>Date Comments Submitted</b>	<b>Public Comment Periods - October 26, 2018 EA</b>	<b>Date Comments Submitted</b>
Eli Shuford		Yes	11/01/2017	No	
Teanna Limpy	Northern Cheyenne Tribal Historic Office	Yes	11/01/2017	Yes	01/04/2019
Marian Hanson	Permittee	No		Yes	11/14/2018
Harold Hanson	Permittee	No		Yes	11/13/2018
Ryan DeVore	MT FWP, Wildlife Biologist	No		Yes	12/10/2018
Dick Artley		Yes		Yes	10/30/2018. Email notifying FS about email address. See response to comment below. 11/10/2018 (email went to Junk Mail folder). See Project File for separate document responding to Mr. Artley's comments.
Sarah J. Johnson/ Michael Garrity	NEC/AWR	Yes	11/02/2017	Yes	11/26/2018

**Eli Shuford, Scoping Comment #1:** This proposal is important to me and for the general public to insure proper management of our forest lands.

**Forest Service Forest Service Response:** Thank you for your support of this project.

**Eli Shuford, Scoping Comment #2:** I determined that the proposal is complete, appropriate research has been conducted, and an action/management plan has been well defined. I strongly agree that the project should be implemented. I recommend no amendment as I see that the project has been thoroughly planned.

**Forest Service Response:** Thank you for your comment. As described in the draft Decision Notice and Finding of No Significant Impact (draft DN/FONSI), Alternative B is responsive to meeting the objectives identified in purpose and need for the project (draft DN/FONSI).

Alternative B – Modified Proposed Action was developed in accordance with and, therefore does not threaten to violate any Federal State or local laws or requirements for the protection of the environment (i.e. Endangered Species Act; National Historic Preservation Act; Migratory Bird Act; Clean Water Act; Clean Air Act; Multiple Use, Sustained Yield Act; and the National Forest Management Act). Discussion in the EA of effects and the related reference in the project file document (Regulatory Framework sections for each resource area in the respective resource report) that this project will not adversely affect soils, water quality, or threatened or endangered species. Alternative B is also consistent with the Custer National Forest Land and Resource Management Plan (1986), the Responsible Official has determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared, nor is an amendment to the Forest Plan needed. (draft DN/FONSI at pages 11 and 18). Also see the Forest Service Response: to comment NEC/AWR Scoping comment #9, regarding whether a Forest Plan amendment was needed.

**Teanna Limpy, Northern Cheyenne THPO, Scoping Comment:** Requesting a face to face consult. Suggest TCS monitors be on site during the restoration.

**Forest Service Response:** The Forest will be submitting a report for SHPO/THPO concurrence.

**Teanna Limpy, Northern Cheyenne THPO, EA Comment:** Requesting a face to face consult. Suggest TCS monitors be on site during the restoration.

**Forest Service Response:** The Forest Service met with Teanna Limpy in May 2018 and discussed the project, and this is the same concern she had then. The Ashland District Ranger and Forest Archaeologist met with Teanna Limpy on June 26, 2019 to discuss the Threemile Restoration and Resiliency Project and other potential future projects being proposed on the Ashland Ranger District. The District will keep the Northern Cheyenne THPO informed of implementation progress on the project.

**Ryan DeVore EA comment:** In moist site areas proposed for thinning and/or broadcast burning, the plan states to reduce trees less than 9 inch DBH to 0-100 trees/acre, with a minimum spacing of 20 feet. I instead suggest removing the 20 feet minimum spacing requirement in order to create more of a patchy distribution of this tree size where and when it is feasible. This will create a mosaic of "small tree" density, and the small patches of thicker cover will: functionally serve as hiding cover for game species, perhaps most of all for white-tailed deer. Even relatively small patches of cover can often times provide a significant hiding cover component, which has potential to increase security and perhaps survival of multiple wildlife species.

**Forest Service Response:** For commercial treatments and post-sale thinning design criteria in the EA provides for clumping of tree in the 5 to 9 inch class, scattered across the units based on where natural clumping of trees occur (EA p. 20). This clumping is also true for trees > 9 inches (EA p. 20). Design criteria also provides for viable hiding cover within 75 feet of open roads or large openings will be retained where feasible (EA p. 24). Broadcast burning in ponderosa pine (no commercial harvest) has a management strategy for unburned mosaics that will provide for areas of existing ponderosa pine cover to be maintained (EA Table 7, p. 22).

**NEC/AWR Scoping comment #1:** The scoping notice at page 12 states that the project is consistent with Forest Plan Forest-wide goals, objectives, standards and guidelines, and Management Area direction, including to maintain, improve or, enhance wildlife habitat quality and diversity. There is not a single habitat standard or objective listed for wildlife in the scoping notice. So how can wildlife habitat be managed with this project?

**Forest Service Response:** Among the several purposes of the project, as noted at page 8 in the Scoping document, are purposes to “Manage to maintain or improve long-term diversity and quality of habitat for Management Indicator Species (MIS) and selected species as identified in the Forest Plan (such as whitetail deer, mule deer, and grouse). Provide habitat diversity, including habitats associated with standing snags, down wood, non-forested grasslands, shrublands, and deciduous woodlands and meet key habitat characteristics for goshawk, whitetail deer, western king bird, and big game. The project was designed to be consistent with Forest Plan goals, objectives, standards and objectives as discussed at pages 12 and 13 in the Scoping notice. Appendix D to the Scoping notice contains excerpts of applicable forest plan, forest-wide and management area goals, objectives and standards, and directs the reader to the Forest Plan for the Custer National Forest (USDA 1986) for more detail, as well as the Forest Plan Management Area Map for Ashland Ranger District. As an example in Appendix D of the Scoping notice, you can find Management Area B standards for wildlife and fish where the emphasis will be to maintain existing fish and wildlife habitats. These habitats will be improved where improvement is consistent with other resource needs. Standards for management areas B, D, G, M, N, and P can be found in Appendix D.

The project is designed to meet Forest Plan standards, see the Environmental Assessment at page 5 in Purpose and Need section, as well as the Wildlife section, at pages 57- 71, and the Wildlife Report, in the Project Record, where effects to Management Indicator Species, Threatened and Endangered and Forest Service Sensitive species, are analyzed. See also the Forest Service Response: to Comment 2, below.

As required by the Forest Plan, regulations and Forest Service policy, the following threatened, endangered, sensitive, management indicator species and major interest species and/or their habitats are discussed in the EA at pages 57 through 71, and are analyzed in detail in the Wildlife Report contained in the project record:

- Northern long-eared bat.
- Northern goshawk.
- Big game (includes elk, white-tailed deer, and mule deer discussion).
- Bats (includes long-eared myotis, long-legged myotis, and Townsend’s big-eared bat discussion).
- Migratory birds (includes loggerhead shrike, golden eagle, merlin, Bullock’s oriole, yellow warbler, ovenbird, spotted towhee, and sharp-tailed grouse).

(Wildlife Report, pages 5-6, project record).

A biological evaluation and assessment (BA) was prepared for the Threemile Restoration and Resiliency Project and the Custer Gallatin East Zone wildlife biologist concluded that the project effects to northern long-eared bats have been analyzed and would be similar in Alternative B, as

has been described for Alternative A (EA at 66), due to similar acreages of commercial harvest with fewer effects from prescribed burning (see Table 1 above). Given implementation of the design criteria common to action alternatives described in detail in the EA at page 23, and given that the project area is not impacted by white-nose syndrome, on the western edge of the species range, and no individuals are not known to occur on the district the project activity is not likely to adversely affect populations of the northern long-eared bat. (EA at 66; and Wildlife Report, at page 21, project record

**NEC/AWR Scoping comment #2:** It is not clear as per the National Forest Management Act (NFMA) how you are ensuring viability and diversity of wildlife without any habitat objectives being implemented in this project area. A lack of objectives/standards in the Forest Plan does not eliminate the need to meet the NFMA. Please define how wildlife that require dense forest habitats are going to be maintained in this project area in the upcoming National Environmental Policy Act (NEPA) analysis.

**Forest Service Response:** As explained in detail in the Wildlife Report Regulatory Framework section at pages 14-18, it is through the National Forest Management Act of 1976 (NFMA), that National Forests are charged with preserving and enhancing the diversity of plants and animals consistent with overall multiple-use objectives stated in the Land and Resource Management Plan (Forest Plan) (NFMA 16USC 1604(g) (3\B)). Forests must also provide habitat capable of maintaining viable populations of wildlife species, and are directed to select management indicator species (MIS) to help ensure species viability (USDA, 1986. P. 17-18). By implementing the Forest Plan and adhering to the direction within, the Forest will provide for the maintenance and improvement of habitats for Habitat Indicator Species / Management Indicator Species (USDA, 1986, P. 18).

In the EA, project alternative effects were evaluated by their anticipated impact to management indicator species (MIS) and other species of key interest (i.e. federally threatened and endangered species, regionally sensitive species, selected game species, and state sensitive species) as mandated by the Forest Plan.

The following threatened, endangered, sensitive, management indicator species and major interest species and/or their habitats are analyzed in detail in the Wildlife Report contained in the Project Record, as well as briefly discussed in the EA: northern long-eared bat; northern goshawk; big game (includes elk, white-tailed deer, and mule deer); bats (includes long-eared myotis, long-legged myotis, and Townsend's big-eared bat); and migratory birds (includes loggerhead shrike, golden eagle, merlin, Bullock's oriole, yellow warbler, ovenbird, spotted towhee, and sharp-tailed grouse).

A comprehensive list of threatened, endangered, regionally sensitive, management indicator species and major interest species that were considered by this project is summarized in the EA in Table 12 and in the Wildlife Report in Tables 2 through 6. Many of the species were analyzed in the Wildlife Report however species, or their habitats, that do not occur in the project area or surrounding were not evaluated in detail in that report, which is contained in the project record. Habitat descriptions are based on current information located in the Montana Natural Heritage

Program, Montana Field Guide (Montana Field Guide 2015). (Wildlife Report, page 6, project record).

**NEC/AWR Scoping Comment #3:** See the comment and Forest Service Response to it and NEC/AWR EA Comment #10, below.

**NEC/AWR Scoping comment #4:** The scoping notice notes that one of the functions of this landscape is to provide recreational hunting. Yet there is no information provided as per objectives of what the fall hiding cover and security goals are for this landscape. Please include an analysis as to how elk and deer security will be provided during the hunting season as per hiding cover based on the current best science for security areas for elk.

**Forest Service Response:** The science used for the Threemile project and the rationale for treatment are provided in the Literature Cited section found at the end of the Wildlife Report. The commenter did not provide any references related to the current best science they refer; therefore the Forest Service was not able to review and respond accordingly. The analyses of mule deer existing condition and effects were done in combination with elk and white-tailed deer. This includes security, habitat effectiveness, winter and non-winter cover, and forage (Wildlife Report p. 28). The project analysis on elk cover and security considered local guidance and locally relevant science and recommendations for elk (2013 USFS/FWP Collaborative Overview and Recommendations for Elk Habitat Management on the Custer, Gallatin, Helena, and Lewis and Clark NFs, and the 2013 Custer, Helena, Gallatin and Lewis and Clark NFs Framework for Project Level Effects Analysis on Elk).

One of the purposes of the project identified in the Purpose and Need section EA at page 8 is “Manage to maintain or improve long-term diversity and quality of habitat for Management Indicator Species (MIS) and selected species as identified in the Forest Plan (such as whitetail deer, mule deer, and grouse). This is a goal identified in the Forest Plan at page 3. The Forest Plan objective of wildlife management is to emphasize active management of wildlife habitat. Mitigation of adverse effects from other resources will continue. (USDA 1986 at 4). “Big game” on the Ashland Ranger District includes mule deer, white tailed deer, elk, and pronghorn. White-tailed deer are included in the Forest Plan as an Indicator Species for dog hair ponderosa pine. Elk, mule deer, white tailed deer, and pronghorn are all listed as Major Interest (Key) Species in the forest plan and are “species commonly hunted” on the district (USDA 1986). Mule deer are also a selected species for Management Area D which is a multi-use management area to maintain and improve wildlife habitats. Project design criteria for big game is described at page 24 in the EA and pages 27-33 in the Wildlife Report. Effects to big game habitat is described at pages 68-69 in the EA and at pages 27-33 in the Wildlife Report. Security and cover objectives for the Ashland Ranger District are laid out in the Custer, Helena, Gallatin and Lewis and Clark National Forests Framework for Project Level Effects Analysis on Elk (USDA 2013). However, given the scale of this document and the variation in habitat across this geographic area, this document does not adequately address how big game use cover and security in the Ashland Ranger District outside of heavily timbered areas and it is recommended to manage based on the natural range of variation. Because of this, local knowledge and consultation with the local FWP Big Game biologist was utilized to develop best science. Security cover is met thought the district and levels of security within the Threemile area reflect the natural range of

variation as animals utilize topography and smaller cover patches in this area. (Further explained in analysis)

**NEC/AWR Scoping comment #5:** With 25 miles of new roads projected, what are the objectives for summer habitat effectiveness for deer and elk? Please use the current best science to identify that summer open road densities will not significantly displace elk and deer.

**Forest Service Response:** The science used for the Threemile project and the rationale for treatment are provided in the Literature Cited section found at the end of the Wildlife Report. No other science was presented by the commenter to consider. The commenter did not provide any references related to the current best science they refer, therefore this new science, and thus the Forest Service was not able to review and respond accordingly. The scoping letter estimated that the Forest Service would need 25 miles of temporary roads to access treatment units. We also indicated in the scoping letter that temporary roads are closed to public use, and upon completion of log haul, would be decommissioned. Better information between scoping and preparation of the EA indicated that we would need 26.0 miles of temporary roads to access treatment units, and those routes would be decommissioned upon completion of log haul, as well (EA at pages 13-14). Based on road density models, this project provides for adequate habitat effectiveness and meets objectives of 40-60% effective habitat both within the project area and across the district as laid out in the Custer, Helena, Gallatin and Lewis and Clark National Forests Framework for Project Level Effects Analysis on Elk (USDA 2013). Regarding the hiding cover analysis that was done for big game, see the Forest Service Response: to Comment NEC/AWR October 26, 2018 comment # 4, below.

**NEC/AWR Scoping comment #6:** What are the goals for summer cover/forage ratios in this landscape? How will these goals be maintained with the proposed logging?

**Forest Service Response:** The analyses of mule deer existing condition and effects were done in combination with elk and white-tailed deer. This includes security, habitat effectiveness, winter and non-winter cover, and forage (Wildlife Report p. 28).

**NEC/AWR Scoping comment #7:** Please include an analysis of how new roads will affect elk and deer vulnerability, since these roads will provide walk-in access for hunters; the density of walk-in access in this landscape will clearly be extremely high after the project, making the existence of security for elk and deer almost impossible.

**Forest Service Response:** See Forest Service Response to NEC/AWR EA Comments #7 and #8, below.

**NEC/AWR Scoping comment #8:** The scoping notice indicates that logging of dense ponderosa pine stands will reduce the canopy below 40%, and the understory will also be treated and possibly burned; what will be the change in hiding cover quality for big game before and after treatment?

**Forest Service Response:** Forest Service Response to NEC/AWR EA Comments #5 and #11, below.

**NEC/AWR Scoping comment #10:** The scoping notice at page 8 indicates that only 36% of this landscape is forested, at 11,318 acres out of 31,235 Forest Service acres. This makes the claim that clearcutting will increase landscape diversity rather curious, since this will reduce existing forest acres even further. We are not aware of any current wildlife management recommendations that recommend such limited levels of hiding cover, either current or proposed.

**NEC/AWR - Scoping Comment #17:** It seems like almost all the dense forest habitat in the southern portion of this project area will be removed with logging, although the numbers in the scoping notice are not clear on this. If there are currently 11,318 acres of forest in the project area, this provides 39% potential hiding cover. If 3012 estimated acres of forest are logged as per Table 2, this would reduce forested habitat to 8,306 acres, or 27%. Why is this a goal for wildlife habitat? It is clear that this impact will clearly require an EIS since impacts will be very significant to wildlife.

**Forest Service Response to NEC/AWR Scoping comments #10 and #17:** We don't know where the commenter got 11,318 acres of forest acres in the project area. That said, please refer to the acreage figures in the EA and the Forest Vegetation Report.

Neither the Scoping document, the EA, nor the Forest Vegetation Report use the term clearcut or propose to use clearcut as a treatment for the Threemile Restoration and Resiliency Project. Rather, treatments identified in the scoping document are identified as Regeneration Treatments, and these are defined as a type of treatment that removes all trees except those needed for the purposes of seed production. Scoping document, Table 1, p. 9).

There are 12,136<sup>1</sup> acres of forest cover in the project area, 7,378 acres (Alt. A) and 7,644 acres (Alt. B) will not be treated (EA in Table 6, at 38; Forest Vegetation Report in Table 36, at p. 59). No treatment areas have 2,521 acres of dense canopy (> to 40%) and within 20 years post treatment will have a higher proportion (+21%) in dense canopy (Forest Vegetation Report in Table 39, at p. 65). Alternative B (in treated acreage) will maintain 592 acres post treatment in high density and higher acreage 20 years post treatment (2,574 acres) due to the amount of intermediate treatments (Forest Vegetation Report Table 39, p. 65). Alternative A (in treated acreage) maintains 801 acres post treatment in high density and higher acreage 20 years post treatment (2,771 acres) due to the amount of intermediate treatments (Forest Vegetation Report Table 17, pp. 35-36).

While an estimate of 40% of horizontal cover was recommended to account for hiding cover for big game, both MTFWP and the USFS recommend managing for cover within the natural range of variation. Many of the studies used to estimate hiding cover were estimated on the western side of the state and may not adequately represent the requirements for the Ashland Ranger

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<sup>1</sup> The Scoping document identified and the Forest Vegetation Report used for calculations as currently being forested with ponderosa pine the 12,136 acres figure. Other specialists, in their reports, used 12,137 acres as currently forested with ponderosa pine for their analysis calculations. This is a minor rounding difference carried through the respective resource area calculations, it does not change the percentage of acres in ponderosa pine forest in the project area, and does not warrant changing the acreage figures in the respective reports.

District. Local knowledge of big game populations and the District was provided by MTFWP (DeVore) stating that 40% is likely outside the natural range of variation and that big game continue to thrive outside of those conditions. Dramatic cover reductions occurred in 2012 with the presence of large scale wildfires and big game population, especially those requiring cover, have continued to increase (MTFWP, 2018). Project activities would reduce hiding cover to approximately 27%, similar what has been seen on the district and has been shown to support increases of big game populations. Studies by Canfield (2011) demonstrated that burned stands with 40% canopy cover were sufficient to provide hiding cover so prescribed burn treatments within forested areas are not expected to significantly reduce hiding cover. (Wildlife Report at pp. 27- 33).

Effects to wildlife habitat have not been found to be significant, and preparation of an EIS is not indicated and would not be required.

Also see the Forest Service Response to NEC/AWR EA Comments #5 and #10, below.

**NEC/AWR Scoping comment #11:** The scoping notice also notes that due to past fires across the district, that forest cover has been reduced from 184,700 acres, or 42% in 1995, to 110,600 acres or 25% in 2012 (Figure 2). Given the paucity of forest habitat for wildlife, why would more removal of forest habitat be proposed on this district to increase habitat diversity, as well as to maintain and enhance wildlife habitat? The scoping notice indicates that clearcuts up to 10 acres in size will be created throughout ponderosa pine forests.

**Forest Service Response:** Discussed in the Purpose and Need for Action (EA pg. 1, 3, 5): By creating resilient landscape conditions, the Forest Service would be able to manage this portion of the National Forest now and into the future so that it reduces the severity of effects from large disturbances (e.g. fire and beetle mortality,) and meets the diverse needs of people; including the demand for rangeland, forest products, hunting and other forms of recreation, aquatic and terrestrial habitat, and other multiple uses of the National Forest (Multiple Use Sustained Yield Act (1960); National Forest Management Act (1976)).

Neither the Scoping document, the EA, nor the Forest Vegetation Report use the term clearcut or propose to use clearcut as a treatment for the Threemile Restoration and Resiliency Project. Rather, treatments identified in the Scoping document are identified as Regeneration Treatments, and these are defined as a type of treatment that removes all trees except those needed for the purposes of seed production. Scoping notice, Table 1, p. 9). Further, refer to the Scoping document, in Table 1 under the CTM (Moist) Treatments, as well as the REGEN ST (Moist) the treatments are described, as:

**Small Regeneration Openings Treatment Details:**

Create small openings ranging from ½ to 4 acres in size on 30 to 40% of the treatment unit. Depending on opening size, 6-10 individual trees per acre may be left to insure an adequate seed source for establishment of a new age class of trees.

Site Preparation – Expose 10 to 20% bare mineral soil to prepare a seed bed for establishment of ponderosa pine seedlings.

And,

**Commercial Regeneration Treatment Activity (Seed Tree)** – Promote new age class of ponderosa pine trees.

Treatment Details:

Create openings ranging up to 10 acres in size. Leave 6-10 individual trees per acre as needed to insure an adequate seed source for establishment of a new age class of trees.

Site Preparation – Expose 10 to 20% bare mineral soil to prepare a seed bed for establishment of ponderosa pine seedlings.

Table 1 in the EA at pages 9-11 contains the same information as Table 1 from the Scoping document.

Also see the Forest Service Responses to NEC/AWR EA Comments #3, #4, #5, #7, and #8, below.

**NEC/AWR Scoping comment #12:** It is not clear why ponderosa pine trees would be removed from woody draws. Why will the removal of these trees benefit wildlife? Why is the mixture of trees and shrubs considered a detriment to wildlife.(sic)

**NEC/AWR - Scoping Comment #13:** What monitoring is currently available on this district to demonstrate that removing trees from woody draws, including mastication, will enhance habitat for wildlife, both game and nongame?

**Forest Service Response:** Forest Plan direction for Woody Draws, Management Area N, which is noted in the Scoping document at page 24, is to provide for healthy, self-perpetuating communities that will have optimum diversity and density of understory and overstory vegetation. Restoration of woody draws within commercial harvest units would occur by removing the overtopping and competing ponderosa pine trees. See the scoping document in Table 1, at page 10. The project recognizes the value of ponderosa pine as a component of the woody draws as indicated in the treatment prescription which maintains a component of pine (10%) with a preference to leave the large fire scared trees (Scoping document Table 1, p. 10 and EA Table 1, p. 10-11). The management objective is to maintain and promote green ash and woody draw vegetation. This includes reducing competing ponderosa pine however still maintains a pine component (Silviculture Report, Table 3 p. 8 and pp. 30, 30-31, 35, 37-38, and 42).

See the Ashland Post Fire Landscape Assessment (2014) for more detailed discussions regarding the conservation goals for hardwood draw and broadleaf deciduous woodland ecosystems (at page 13), disturbance processes (pages 12 and 21), biological diversity existing condition especially for vegetation, including forest and woodlands, shrubland and grassland and riparian and wetlands (at pages 22-25, the aquatic, riparian hardwood draw and broadleaf deciduous ecosystems (section 4.2, pages 28-36). Especially helpful is the discussion of the relationship of hardwood draws and riparian at pages 30-31, and the hardwoods overview at pages 31-35, which includes a pre-burn assessment and inventory, and a post-burn assessment, and to see Appendix A for maps and characterizations.

The following is an excerpt from the Ashland Post Fire Landscape Assessment (USDA 2014). It provides information assessing existing conditions of woody draw and broadleaf deciduous ecosystems on Ashland from a pre-burn and post burn setting (pages 31-32) and Figures 7 and 8 in the Assessment are general location maps of green ash, and green ash existing condition- pre-burn.

general location maps at page 33.

The following information is presented for both the remote sensing data as well as the specific field inventoried data that describes existing conditions for both pre-burn (pre-1995) and post burn (post 1996) settings. See Appendix A for maps of the following characterizations.

**Pre-burn District-wide.** Approximately 2,133 NFS acres<sup>2</sup> of green ash draws and isolated pockets occur on the Ashland Ranger District. This is less than 1/10 of a percent of the total Ashland landscape acreage of 436,546. Approximately 8,411 NFS acres of mesic shrubs, such as chokecherry or snowberry, occur on the Ashland Ranger District. Mesic shrubs are often associated plant species found within green ash draws, but it is unknown whether these areas have site potential to support green ash (See Appendix A for maps and acreage by Allotment and Pasture).

**Post-burn District-wide.** Of the 2,133 NFS acres of green ash draws and isolated pockets occurring on the District, approximately 780 acres or 37% were burned in recent fires (since 1988). Of the 780 acres burned, 35% (275 acres) of green ash stands burned with high severity, 38% (297 acres) with moderate severity, and 27% (207 acres) with low severity (see Appendix A for burn severity on green ash draws by Allotment and Pasture).

**Pre-burn Inventoried.** Approximately 299 NFS acres<sup>3</sup> of main stem hardwood draws were inventoried and their condition classified prior to recent fires. Of the 299 acres, approximately 21% were considered healthy, 54% considered at risk, and 25% considered unhealthy prior to recent fires (see Appendix A for pre-burn condition by Allotment and Pasture).

**Post-burn Inventoried.** Of the 299 inventoried NFS acres, 142 acres or 47% were burned in recent fires. Of the 142 acres burned, 22% (31 acres) of healthy stands burned, 54% (77 acres) of at risk stands burned, and 24% (34 acres) of unhealthy stands burned. Of the 31 acres of healthy stands burned, 15 acres were burned at moderate and high burn severity where these areas may likely be set back to “at risk” conditions (see Appendix A - Inventoried Hardwood Draws - Post-burn Severity by Allotment/Pasture and by Fire Year).

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<sup>2</sup> Source: VMAP

<sup>3</sup> Source: Inventory data located at the Ashland Ranger District Office with a few stands being assessed by professional judgment. Acreage derived from buffering linear GIS features by using a 20 foot centerline (40 foot valley bottom width for the buffer. District personnel recommended this figure as being representative as an average hardwood draw width across the district.

Discussed further in the Hardwoods Overview, on pages 31 through 35, are the desired vegetative characteristics that would meet the Forest Plan goal for woody draws (USDA 1986 at page 83). It reads in part:

Examples of undisturbed and disturbed green ash stands have been characterized. Girard (1989) and Hanson and Hoffman (1988) described a late successional undisturbed green ash/chokecherry community for the Green Ash/Choke Cherry Habitat Type. The characteristics of this community best correspond to the desired condition for meeting the Forest Plan goal of providing for healthy self-perpetuating plant communities with optimum diversity and density of understory vegetation.

Undisturbed green ash stands are typically characterized by three layers of woody vegetation (see the following Table ), a closed canopy overstory layer dominated by green ash, a middle layer composed of tall shrubs and green ash saplings, and a lower layer mid and low shrubs, and herbaceous vegetation layer (Girard et al 1989, Hanson and Hoffman 1988). This contrasts with disturbed stands, which are typically woodlands with an open overstory (< 69% tree foliar cover) and a single understory layer of low shrubs and herbaceous vegetation dominated by snowberry and Kentucky bluegrass. The abundance of chokecherry (*Prunus virginiana*) is also reduced in disturbed communities. The middle layer of tall shrubs and green ash saplings is often missing (Hanson and Hoffman 1988).

**NEC/AWR - Scoping Comment #15:** This project is in part a grazing program, with the burning being completed to enhance livestock use on the 6 allotments in this landscape. This grazing management needs to be included in a separate NEPA analysis for grazing, instead of being combined with a logging and fuels reduction program.

**Marian Hanson – EA Comment #4:** You have not addressed any grazing activity after the trees are removed. You know, grass grows when the tree cover is removed.

**Forest Service Response:** The Threemile Restoration and Resiliency Project is not a rangeland management project. See the purpose and need for the proposed treatments in the EA at pages 3-7. The purposes are briefly summarized on pages 3 and 5 (Restore ponderosa pine to a more heterogeneous landscape with a diverse age and size structure; Tree removal and RX burning will increase available forage across the district providing additional forage and grassland habitat for wildlife; Reduce fuel loads to enhance fire suppression capabilities; Use the values at risk identified in the Powder River Wildfire Protection Plan to help in planning treatments on NFS lands; Provide wood products to contribute to employment and industry in local communities ; and Manage to maintain or improve long-term diversity and quality of habitat for Management Indicator Species (MIS) and selected species as identified in the Forest Plan (such as whitetail deer, mule deer, and grouse)), then in some detail on pages 5 through 8. In the Introduction to the Purpose and Need, we state that we:

...are proposing the Threemile Restoration and Resiliency Project to manage this fire adapted ecosystem towards a mosaic of forest, woody draw, and grassland vegetation that

restores and improves ecosystem resiliency. The intent would be to achieve this outcome through application of commercial timber harvest, non-commercial treatments, and prescribed burning.

By creating resilient landscape conditions, the Forest Service would be able to manage this portion of the National Forest now and into the future so that it reduces the severity of effects from large disturbances (e.g. fire and beetle mortality,) and meets the diverse needs of people; including the demand for rangeland, forest products, hunting and other forms of recreation, aquatic and terrestrial habitat, and other multiple uses of the National Forest (Multiple Use Sustained Yield Act (1960); National Forest Management Act (1976)).

(EA at p. 2).

As a part of reducing fuel loads to enhance fire suppression capabilities, treatments are designed to change the fuel model from heavier fuels and/or ladder fuels to more of a grass understory model, changing from a Fuel Model (FM) 10 (FM10) to a Fuel Model 2 (FM2). (EA at page 53) (Fire & Fuel Management Report, page 46, project record). Mechanical and prescribed burn treatments under the two action alternatives would reduce fuel loadings where treated. This would also break up vertical and horizontal contiguous vegetation to create mosaic patterns that alter fire effects and provide for some firefighter safety throughout the area. (EA at pp. 55 and 56; Fire & Fuel Management Report, pp. 54-55, project record).

Treated areas, in general, would provide a fuel model with a grass understory that carries the fire spread, giving firefighters more opportunity to implement suppression tactics safely. High intensity torching or crown fires would have more limitation with treatment due to the more open crowns and the removal of associated ladder fuels after treatment. This would be expected for at least 20 years. (EA at pp. 55 and 56; Fire & Fuel Management Report, p. 55, project record).

The Threemile Restoration and Resiliency Project Area encompasses approximately 32,924 acres of National Forest System (NFS) lands. It is characterized by several drainages with forested north slopes, open grassland ridge-tops, south slopes with scattered to moderately stocked ponderosa pine stands, and riparian/woody draw ecosystems. Typical vegetation is dependent on aspect and topographic position. Timbered north slopes are dominated by ponderosa pine, Idaho fescue, and chokecherry or snowberry. Vegetation on residual uplands is generally dominated by western wheatgrass, green needlegrass, and Idaho fescue with silver sagebrush and big sagebrush scattered throughout. South slopes are dominated by ponderosa pine, bluebunch wheatgrass, little bluestem, and scattered skunkbush sumac. Green ash, chokecherry, and several other woody deciduous species dominate the riparian/woody draw ecosystems. (EA at page 2). See Appendix B Map 2 from the Scoping document, for an understanding of the distribution of vegetation across the project area, especially forest and non-forest.

We note that the proposed treatments would have a positive effect on rangeland conditions and increase available forage for livestock through nutrient cycling and forb releases after burning. There would be a temporary loss of forage during the treatment period due to temporary roads

and treatment activities that may cause some displacement for livestock. In the short and long-term, livestock distribution should improve. (Rangeland Management and Noxious Weeds Report, page 15, project record). In Alternative B broadcast burning over 1508 acres of grasslands and 2497 acres of forested lands may impact timing and/or duration of livestock grazing. Prescribed burns can increase plant palatability, availability and yield 3-4 years post-fire by removing old growth thus improving access to new growth. (EA at page 99; Rangeland Management and Noxious Weeds Report, page 15, project record)

**NEC/AWR - Scoping Comment #16:** The scoping notice indicates that dense forests on north slopes are to be thinned to have an open canopy. It is also noted that open-canopied forests that currently exist on southern exposures will be further thinned to have an even more open canopy. What is the rationale to have these forests opened up for wildlife? Where will dense forests be maintained for wildlife that require these dense forests, including hiding and thermal cover for big game?

**Forest Service Response:** For commercial treatments and post-sale thinning design criteria in the EA provides for clumping of trees in the 5 to 9-inch class, scattered across the units based on where natural clumping of trees occur (EA p. 20). This clumping is also true for trees > 9 inches (EA p. 20). Design criteria also provides for viable hiding cover within 75 feet of open roads or large openings will be retained where feasible (EA p. 24). Broadcast burning in ponderosa pine (no commercial harvest) has a management strategy for unburned mosaics that will provide for areas of existing ponderosa pine cover to be maintained (EA Table 7, p. 22).

**NEC/AWR - Scoping Comment #18:** Within the areas proposed for treatment, it is noted that there are 4,759 acres of forest and 3,297 acres of non-forest. This would indicate a forest habitat level of 59%, which by current standards is still below the 66% level identified as good cover. After treatment or logging of 3012 acres, there will be only 1747 acres of forest cover remaining, which is 21 % forest cover. Why is this an objective for wildlife and hunting recreational opportunity?

**Forest Service Response:** There are 12,136 acres of forest cover in the project area, 7,378 acres (Alt. A) and 7,644 acres (Alt. B) will not be treated (EA in Table 6, at p. 38; Forest Vegetation Report in Table 36, at p. 59). No treatment areas have 2,521 acres of dense canopy ( $\geq$  to 40%) and within 20 years post treatment will have a higher proportion (+21%) in dense canopy (Forest Vegetation Report in Table 39, at p. 65). Alternative B (in treated acreage) will maintain 592 acres post treatment in high density and higher acreage 20 years post treatment (2,574 acres) due to the amount of intermediate treatments (Forest Vegetation Report Table 39, p. 65). Alternative A (in treated acreage) maintains 801 acres post treatment in high density and higher acreage 20 years post treatment (2,771 acres) due to the amount of intermediate treatments (Forest Vegetation Report Table 17, pp. 35-36).

While an estimate of 40% of horizontal cover was recommended to account for hiding cover for big game, both MTFWP and the USFS recommend managing for cover within the natural range of variation. Many of the studies used to estimate hiding cover were estimated on the western side of the state and may not adequately represent the requirements for the Ashland Ranger

District. Local knowledge of big game populations and the District was provided by MTFWP (DeVore) stating that 40% is likely outside the natural range of variation and that big game continue to thrive outside of those conditions. Dramatic cover reductions occurred in 2012 with the presence of large scale wildfires and big game population, especially those requiring cover, have continued to increase (MTFWP, 2018). Project activities would reduce hiding cover to approximately 27%, similar what has been seen on the district and has been shown to support increases of big game populations. Studies by Canfield (2011) demonstrated that burned stands with 40% canopy cover were sufficient to provide hiding cover so prescribed burn treatments within forested areas are not expected to significantly reduce hiding cover. (Wildlife Report at pp. 27- 33).

Effects to wildlife habitat have been found not to be significant, and preparation of an EIS is not indicated and would not be required.

See also the draft Decision Notice and FONSI that discusses how Alternative B meets the purpose and need, is not significant, is consistent with the Forest Plan, that an amendment to the Forest Plan is not needed, and that preparation of an EIS is not needed. (draft DN/FONSI).

**NEC/AWR - Scoping Comment #19:** The 25 miles of new roads proposed for this project is simply shocking. This would be an increase in the road density in the 8056 treatment area, or 12.6 square miles, of almost 2 miles per section. This means that with existing roads, the impact of total roads needed for logging will basically eliminate big game habitat effectiveness, which is essentially gone at 2 miles per section. This is a good example, along with the resulting elimination of forest cover to about 20%, a Forest Plan amendment is needed before this project can go forward.

**Forest Service Response:** Habitat effectiveness is analyzed within the project report concluding that habitat effectiveness will be reduced during project activities and in the short term , especially during project activities, and until cover can regenerate within 10-40 years. While big game within the project area may be displaced until the temporary roads for project work are decommissioned, there are large portions of the project area that remain effective habitat, providing opportunities for displacement (Wildlife Report at pp. 47-49). Table 9 shows that for alternatives A and B habitat that is no longer effective will increase from 6% to 27%-30% leaving over 70% of habitat available for use, exceeding the recommendation of 50% habitat use potential. Roads that are not open to the public were excluded from habitat effectiveness analysis based on literature the suggested elk do no avoid infrequently used routes (R1 Assessment). After project activities, habitat effectiveness will increase as 2.1 miles of road will be decommissioned. In order to reduce the impacts of roads on big game, a road buffer of 75 feet was recommended along major motor ways (Wildlife Report at pp. 28-33). Based on these conclusions, a Forest Plan amendment is not necessary.

See also the response to NEC/AWR EA Comments #7.

**NEC/AWR - Scoping Comment #20:** The scoping notice repeatedly states that the end goal is to have a mosaic of habitats. However, what is the criteria for this mosaic is never identified. It is

unclear why the existing condition does not already provide a mosaic of habitats. Why is this existing habitat a problem, and why will logging and burning fix it?

**Forest Service Response:** Mosaic was used five times in the scoping document. The context is dependent on the area that is being used, it is never stated to have a mosaic of habitats. The long-term Forest Plan Forest-wide and Management Area direction is to have a mosaic of resilient forest cover and re-establish forest cover across the Ashland District where it has been lost due to extensive wildfire mortality (Scoping Document, pg. 4). As noted, this is consistent with the Forest Plan, as well as the Multiple Use Long-term Sustained Yield Act (1960), and the National Forest Management Act, as amended (1976) (Scoping Document, pg. 4). To help in creating a patch mosaic of openings across the landscape and be efficient in the implementation of the proposal, commercial treatment units less than or equal to 10 acres in size throughout the project area will be regeneration harvested (Scoping Document, pg. 8). The end result may include a mosaic of burned and unburned areas (RXB PP – forested prescribed fire treatments). Includes hand or mechanical fireline construction – a control line that is scraped or dug into mineral soil (Scoping Document pg. 10). The end result may include a mosaic of burned and unburned areas (RXB NF – non forested prescribed fire treatments). The purpose of the Threemile Restoration and Resiliency Project is to manage this fire adapted ecosystem towards a mosaic of forest, woody draw, and grassland vegetation that restores and improves ecosystem resiliency. The intent would be to achieve this outcome through application of commercial timber harvest, non-commercial treatments, and prescribed burning. (Scoping Document pg. 1). In regards to the forested treated and non-treated areas, the purpose and need is to restore ponderosa pine ecosystems towards a more heterogeneous forested landscape with a diverse age and size structure (including old growth), understory structure and composition, patch size, and pattern that are resilient to natural disturbances (e.g. fire, insect/disease, climate change) (Scoping Document pg. 7). Creating heterogeneity through the proposed treatments on the forested landscape can be seen in summarized tables looking at measures of: various individual tree densities (trees per acre), clumps of trees, no treatment area, new age class (small openings), large tree, and return of forest cover (Silviculture Report Tables 19 and 41, pg. 39 and 68).

**NEC/AWR - Scoping Comment #21:** We have noticed extensive knapweed infestations in old burned areas just west of Ashland. What monitoring data is available on existing weed infestations in this project area, including past burns and wild fire areas. What is the expected effectiveness of treatment on any new weed infestations that will be created from this logging and burning?

**Forest Service Response:** The commenter does not provide any specific location information of these knapweed infestations, nor any kind of legal location information as to where these infestations exist, for context. The District conducts annual noxious weed control implementing the Custer NF Noxious Weed ROD and attendant FEIS (2006). The Three Mile Restoration and Resiliency Project area is relatively free of noxious weeds. There are small patches of spotted knapweed (*Centaurea maculosa*) in disturbed areas around tanks and along roadways (see Table 28 at page 100 in the EA). Larger infestations occur in the Coleman Draw allotment in areas that were historically terraced and replanted with crested wheatgrass. A total of 542 gross acres are

impacted by spotted knapweed with only 133 acres of actual infestation. The majority of these acres are within the project area boundary but are outside any proposed treatment areas. There are no known infestations of other state listed noxious weeds in the Three Mile Project Area; though leafy spurge, houndstongue, and Canadian thistle exist on the Ashland Ranger District and are not fully inventoried. (Rangeland Management and Noxious Weeds Report, page 15, project record).

For noxious weed treatments, see Design Features Common to the Action Alternatives in the EA at page 29.

At pages 38-39, and Figure 9, in the Ashland Post Fire Landscape Assessment (2014) for a description and locations of noxious weeds across the District. A reader can make out the project area for the Threemile Restoration and Resiliency Project to see that the project area is relatively free of noxious weeds, as noted above. See also Appendix C in the Ashland Post Fire Landscape Assessment (2014) for more detail.

**NEC/AWR - Scoping Comment #23:** The scoping notice indicates that key habitat characteristics will be maintained for species as the goshawk and white-tailed deer. What are these key habitat features, where are they in the project area, and how will they be maintained?"

**Forest Service Response:** As required by the Forest Plan, regulations and Forest Service policy, the following threatened, endangered, sensitive, management indicator species and major interest species and/or their habitats are discussed in the EA at pages 57 through 71, and are analyzed in detail in the Wildlife Report contained in the project record:

- Northern long-eared bat.
- Northern goshawk.
- Big game (includes elk, white-tailed deer, and mule deer discussion).
- Bats (includes long-eared myotis, long-legged myotis, and Townsend's big-eared bat discussion).
- Migratory birds (includes loggerhead shrike, golden eagle, merlin, Bullock's oriole, yellow warbler, ovenbird, spotted towhee, and sharp-tailed grouse).

(Wildlife Report, pages 5-6, project record).

Goshawk is the Custer National Forest's indicator species for old growth timber (p. 18, Forest Plan, USDA 1986). (Wildlife Report at p. 22). The Forest Plan defines old growth timber, but does not define old growth forest (USDA, 1986, p. 136). Therefore, the Forest uses Region One's definition of old growth as documented by Green et al. (2007). Thus defined, old growth in ponderosa forests on the eastside of Region 1 are characterized by single or multi-storied canopy, minimum age of largest trees is 180 years,  $\geq 4$  trees/acre with dbh  $> 17$  inches, and a basal area  $\geq 40$  ft<sup>2</sup>/acre (Green et al. 2007). The existing condition of goshawk habitat on the Ashland Ranger District is described at pages 22-24 in the Wildlife Report. The methodology used for analyzing the effects of the proposed actions to goshawk habitat is described in the Wildlife Report at pages 24 and 25. The project wildlife biologist used the FS Region 1 document produced in 2009, titled *Northern Goshawk Northern Region Overview* (Brewer, et al. 2009) (referred to herein as "Overview"), which summarized existing knowledge about goshawk

habitat needs, provided a consistent approach for analyzing available goshawk habitat, and listed other management considerations that need to be considered during project planning and analysis. The Overview described methods to classify goshawk habitat at multiple-spatial levels and provided a consistent methodology to classify PFA, foraging, and nesting habitat. The Northern Region Overview was used to provide the basic framework and models for this analysis. Further Forest level guidance in 2016 clarified nesting habitat constraints based on updated modeling efforts.

Changes to forage distribution from prescribed burning will increase available quality and quantity of forage for big game in the short term with cover and security returning, with increased levels, within 10-40 years post treatment due to the decommissioning of 2.1 miles of road. Mitigations, such as road buffers, aim to offset the short-term reductions in security and cover (Wildlife pp32-33). The effects of forest management to goshawk nesting habitat are analyzed and follow R1 guidelines to protect known nests and provide for 240 acres of nesting habitat for each 5,000 acre home range. A no disturbance buffer around the known nest with an additional 420 acre buffer, with timing restrictions, was center on the nest to reduce disturbance from all project activities. In areas outside of the know goshawk next area, foraging habitat is not expected to be further impacted by the addition of prescribed burning (Wildlife pp 25-27). Clark's nutcrackers are ponderosa pine dependent and treatment will reduce available nesting habitat and forage however it will return the stands within the project area to a more historic forest structure and reduce the potential for high intensity wildlife that would remove ponderosa pine from the project area. Finally, Clark's Nutcrackers are not known to occur within the project are and are rarely (<1 observation annually since 2002) observed on the district while effects to the species habitat is expected to be negative in the short to moderate time periods, effects to the species are negligible (Wildlife pp 12, 34-36). Loggerhead shrike are grassland dependent and utilize areas with open landscapes and riparian areas where available. Effects to the species from project activities are expect to be positive as abundance of grassland habitat is expected to increase and prescribed burning activates will create a grassland mosaic across the habitat, creating a variety of foraging and nesting habitat while the creation of a more open forest structure will encourage shrub growth for nesting (Wildlife 34-36).

**NEC/AWR - Scoping Comment #24:** The scoping notice suggests that clearcutting will create a new age class of forest. The effect of habitat fragmentation is never identified. What size of dense forest tracts is considered important for wildlife, and how will these tracts be maintained with this project?

**Forest Service Response:** Treatments identified in the scoping notice, the EA and the Forest Vegetation Report are identified as Regeneration Treatments, and these are defined as a type of treatment that removes all trees except those needed for the purposes of seed production. (Scoping notice, Table 1, page 9; EA, page 9). There are no clearcuts proposed. The overall intent for forest vegetation management is to change existing forest vegetation composition and structure to conditions that may be more resilient to disturbances such as outbreaks of pine beetles (MPB and engraver beetle)

and wildfires, by creating variable densities of individual trees, providing for clumps and creating openings (ICO concept).

For commercial treatments and post-sale thinning design criteria in the EA provides for clumping of tree in the 5 to 9 inch class, scattered across the units based on where natural clumping of trees occur (EA p. 20). This clumping is also true for trees > 9 inches (EA p. 20). Design criteria also provides for viable hiding cover within 75 feet of open roads or large openings will be retained where feasible (EA p. 24). Broadcast burning in ponderosa pine (no commercial harvest) has a management strategy for unburned mosaics that will provide for areas of existing ponderosa pine cover to be maintained (EA Table 7, p. 22).

**NEC/AWR - Scoping Comment #25:** As well, how will high densities of snags be maintained in clearcuts and commercial thinning units? It appears that snag habitat is going to be sacrificed for fuels management, since snag recruitment in thinning units will be severely reduced. Where is the Forest Plan analysis of the costs of fuels management to wildlife?

**Forest Service Response:** The Threemile Restoration and Resiliency Project does not propose to salvage harvest. See the purpose and need for the proposal in the EA at pages 3-7. Mitigations of “leave trees” to replace snags in absence of snags is included in the migratory bird section. All existing snags, greater than or equal to 4.5” diameter, which do not pose a safety hazard during project implementation (EA at page 23). Actually, treatments identified in the scoping notice, the EA and the Forest Vegetation Report are identified as Regeneration Treatments, and these are explained as a type of treatment that removes all trees except those needed for the purposes of seed production. Scoping notice, Table 1, page 9; EA, page 9).

Also see the Forest Service Response: to Comments below to your comments #5 and #10 in your letter commenting on the October 26, 2018 EA.

**NEC/AWR - Scoping Comment #26:** The scoping notice suggests that commercial logging which thins the forest will improve forest health. It appears that wildlife is not included as a part of the forest ecosystem. How can the definition of forest health exclude wildlife?

**Forest Service Response:** Defined in the Purpose and Need for Action (EA pages. 1, 3, 5): By creating resilient landscape conditions, the Forest Service would be able to manage this portion of the National Forest now and into the future so that it reduces the severity of effects from large disturbances (e.g. fire and beetle mortality,) and meets the diverse needs of people; including the demand for rangeland, forest products, hunting and other forms of recreation, aquatic and terrestrial habitat, and other multiple uses of the National Forest (Multiple Use Sustained Yield Act (1960); National Forest Management Act (1976)). Restore ponderosa pine ecosystems...Manage to maintain or improve long-term diversity and quality of habitat for Management Indicator Species...Provide habitat diversity....

**NEC/AWR - Scoping Comment #27:** Again, this fuels management program has a goal of removing the understory vegetation that creates fuels ladders into the canopy. There seems to be no acknowledgement that these fuels are also wildlife habitat. This is a severe impact on wildlife,

removing the understory. This again demonstrates that a Forest Plan amendment is needed before more fuels management programs are implemented.

**Forest Service Response:** As described in the draft Decision Notice and Finding of No Significant Impact (draft DN/FONSI), Alternative B is responsive to meeting the objectives identified in purpose and need for the project (draft DN/FONSI. Alternative B – Modified Proposed Action was developed in accordance with and, therefore does not threaten to violate any Federal State or local laws or requirements for the protection of the environment (i.e. Endangered Species Act; National Historic Preservation Act; Migratory Bird Act; Clean Water Act; Clean Air Act; Multiple Use, Sustained Yield Act; and the National Forest Management Act). Prescribed burning is within the NRV and will help to create mosaic stands and multiple stages of grassland growth across the project area. Discussion in the EA of effects and the related reference in the project file document (Regulatory Framework sections for each resource area in the respective resource report) that this project will not adversely affect soils, water quality, or threatened or endangered species. Alternative B is also consistent with the Custer National Forest Land and Resource Management Plan (USDA 1986), the Responsible Official has found that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared, nor is an amendment to the Forest Plan needed. (draft DN/FONSI at pages 11 and 18).

See the Forest Service Response to NEC/AWR Scoping Comment # 26 above, especially regarding the purpose and need for the proposed action and to create resilient landscapes.

See also Forest Service Response to NEC/AWR EA Comments #4, 6, 7, and 8, below.

**NEC/AWR - Scoping Comment #28:** We have a concern about the costs of this program, since it appears that this landscape has a very limited potential to produce timber. How can it be feasible to log this landscape when 25 miles of roads are required, or about 2 miles per section. Please include an economic analysis of how much this program will cost in the NEPA analysis.

**Forest Service Response:** As discussed in the Economics in the EA at pages 111-112 and the Economics Specialist Report at page 7, the estimation of project feasibility was based on the Region 1 sale feasibility model, which is a residual value timber appraisal approach that takes into account logging system, timber species and quality, volume removed per acre, lumber market trends, costs for slash treatment, and the cost of specified roads, temporary roads and road maintenance.

The financial efficiency analysis is specific to the timber harvest and restoration activities associated with the alternatives (as directed in Forest Service Manual 2400-Timber Management and guidance found in Forest Service Handbook 2409.18). Costs for sale preparation, sale administration, regeneration, and restoration activities are included. All unit costs, quantities, and timing of activities were developed by the specialists on the project's interdisciplinary team. If exact costs were not known, the maximum of the cost range was used to produce the most conservative PNV result.

The financial efficiency analysis is not intended to be a comprehensive benefit-cost or PNV analysis that incorporates a monetary expression of all known market and non-market benefits

and costs that is generally used when economic efficiency is the sole or primary criterion upon which a decision is made. Many of the values associated with natural resource management are best handled apart from, but in conjunction with, a more limited benefit-cost framework. These values are discussed throughout the Environmental Assessment, for each resource area. (EA at pp. 111-113; Economic Specialist Report, page 7, project record).

As discussed in the EA and the Economics Specialist Report, when evaluating trade-offs, the use of efficiency measures is one tool used by the decision maker in making the decision. Many things cannot be quantified, such as safety, effects on wildlife and the restoration of watersheds and vegetation. The decision maker takes many factors into account in making the decision. (EA at 112-113, EA Table 33 Project Feasibility and Financial Efficiency Summary (2017 dollars); Economic Specialist Report, page 8, project record).

Approximately 2,941 acres in Alternative B would be treated commercially and provide for wood products to local industry (see the Economics section the EA at pages 111 through 115 and the Economics Report in the project record). Alternative B commercially treats 260 more acres than Alternative A. The No Action Alternative does not provide wood product, therefore it does not meet the purpose and need for action. (Forest Vegetation Report, pages 87-88, project record).

**Dick Artley – October 26, 2018 EA Comment:** Dear Mr. Slacks, Your comments letter for the Threemile Restoration project shows the email we should use is: FS-comments-northern-custer-ashland@fs.fed.us

Are you sure there's not a mistake? Every other national forest in the United States would use: comments-northern-custer-ashland@fs.fed.us .....without the FS

Is the Custer using a new format?

**Forest Service Response:** Dear Mr. Artley,

Thank you for your note. No, the Custer Gallatin is not using a new format. You are correct, we mistakenly indicated in the email address for comments the “FS-“, which should not have been included as part of that address. Thank you for bringing this to our attention. We have corrected that error in the legal notice and letter announcing the notice and comment period. The legal notice is planned to publish Friday, November 2, 2018. Find enclosed corrected copy of the letter announcing the availability of the EA on the Forest web site, as well as the links and comment email address. Thank you, Mark Slacks

**NEC/AWR- October 26, 2018 EA Comment #1:** The overall impact of fires on forest habitat in the project area is never disclosed.

The total acreage of forest habitat in this project area was never disclosed in the EA. Instead, the EA says that there are 12,137 acres of "currently forested acres." There have been 22,576 acres of fires in this landscape from 200 (sic) to 2015. However, the EA never identifies how many acres of forest were impacted by these fires. The cumulative impact of fires on forest habitat, such as for the goshawk and hiding cover and security for big game, is clearly an important impact that should affect the current proposal to reduce goshawk habitat and big game hiding

cover and security. The public has no way to understand how past fires are being addressed in this project as a result. Information on the impact of past fires on forest habitat needs to be included in the EA and impacts of such on wildlife evaluated and disclosed to the public.

**Forest Service Response:** Appendices A, B, and C to the Scoping document included three maps, respectively, Map 1 is a general vicinity map, Map 2 an existing vegetation map, and Map 3 a proposed treatments units map. The Scoping document at pages 1 and 2 describes the existing condition, and the EA at page 5 and the Forest Vegetation Report at page 9 all note the project area encompasses 32,924 acres, of which about 12,136 acres are currently forested with ponderosa pine. The project area lies south of Highway 212 approximately 9 air miles east of Ashland, Montana. The southern half, currently has the largest extent of forest cover and where the majority of the proposed treatments would occur. The northern portion has experienced multiple large fires since 2000 and currently is in various stages of recovery. These fires have resulted in about 827 acres of non-forest conditions, that were previously forested and about 4,241 acres in a state of naturally reforesting. Proposed vegetation treatments are focused on the existing ponderosa pine forest cover, which this analysis will focus on (See Threemile Restoration and Resiliency Project Environmental Assessment Proposed Treatment Prescriptions (Tables 1, 2, 3, 4 and 5) and Scoping document (Tables 1, 2, and 3). The ponderosa pine forested setting is the resource of concern and beetle hazard, vegetation composition, vegetation structure and planting are the issues pertaining to the purpose and need for restoring the pine ecosystems to a more heterogeneous landscape that are resilient to natural disturbances.

The Scoping document at pages 2-4 briefly describes the existing conditions in the project area, noting, in part, that several large fires have been near of adjacent to the project area. The EA and Scoping document note in the Desired Conditions section that *Wildfires across the District totaling 380,000 acres- a portion of these being uncharacteristically large and severe- in the last 20 years. Of those acres, 290,000 burned in 10 large fires from 2000 to 2017. Further noting These fires have reduced the extent of forest cover across the district. Figures 1 and 2 illustrate the changes in forest cover since 1995 to 2012 post fire. The long-term Forest Plan Forest-wide and Management Area direction is to have a mosaic of resilient forest cover and re-establish forest cover across the Ashland District where it has been lost due to extensive wildfire mortality.*

The Scoping document then notes at page 7 *In light of the conditions and stressors described above the desired condition is to manage for a heterogeneous forested landscape with a diverse age and size structure that includes old growth, understory structure and composition, patch size, and pattern. Non-forested areas (native grasslands and upland shrub dominated communities) would be managed for diverse native species composition and structure, as well. Creating a pattern of these diverse vegetative structure and species assemblages across the landscape will be more resilient to natural disturbances such as, fire, drought, insects, disease, climate change, and herbivory.*

Then in the Purpose and Need section of the EA the Forest Service describes that the existing and desired conditions support the need to: Restore ponderosa pine ecosystems to a more heterogeneous forested landscape; reduce fuel loads to enhance fire suppression capabilities; use

values at risk identified in the Powder River Wildfire Protection Plan to help in the planning of vegetation management treatments on NFS lands; provide wood products to contribute to employment and industry in local communities and help support the sustainable timber supply from NFS lands; and, manage to maintain or improve long-term diversity and quality of habitat for Management Indicator Species (MIS) and selected species as identified in the Forest Plan (such as whitetail deer, mule deer, and grouse). (EA p. 2)

*Past Actions* are addressed by the Council on Environmental Quality (CEQ) 1/ in the following manner, “Generally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions. 2/. In other words, the effects of all past actions have created the current affected environment/existing condition, consequently specific past actions do not need to be identified for the cumulative impacts analysis. However, in general, past actions include grazing, timber harvest, pre-commercial thinning, planting, recreational camping, outfitting and guiding, prescribed burning (pile and broadcast), incidental firewood cutting.

Appendix A to the EA included three maps: Map 1 Vicinity Map; Map 2 Treatment Units for Alternative A; and Map 3 Treatment Units for Alternative B. These maps were also provided in hard copy format to the commenter, Sarah Jane Johnson, upon her request.

Also see the Forest Service Response to NEC/AWR EA Comment #2 below.

**Marian Hanson, - October 26, 2018 EA Comment #1:** It is time to take action and get the area cleaned up. I believe I have commented on this area in the past, and nothing has been done.

**Forest Service Response:** We agree, that why the Forest Service is proposing to take action. See the Purpose and Need for the project proposal in the EA at pages 3-8, as well as the Ashland Post Fire Landscape Assessment (2014). Yes, you have commented on proposals in the past, and we thank you for your input, your interest and support of those projects (i.e. Threemile Stewardship, 2003).

**Marian Hanson, - October 26, 2018 EA Comment #2:** The South half that needs attention, needs to be done soon, or you will have a wild fire like the North part of the project.

**Forest Service Response:** We agree and is part of the reason why we have proposed taking action, whether through Alternative A or Alternative B, as No Action would not meet the purpose and need for the proposal. See the Purpose and Need for the project proposal in the EA at pages 3-8, as well as the Ashland Post Fire Landscape Assessment (2014). We want to increase the resiliency of stands in the project area by creating a mosaic of resilient forest cover and re-establish forest cover across the Ashland District where it has been lost due to extensive wildfire mortality (Scoping Document, at p. 4).

**Marian Hanson – October 26, 2018 EA Comment #3:** My only concern is the re-planting of trees – the places you have planted in the last several years have just burned up, and that’s a waste of time & money

**Forest Service Response:** The commenter did not specifically identify the areas that have been planted and burned up. Within the project boundary 54 acres have been planted and certified as stocked, they have not been impacted by wildfire since planting in 2012.

**NEC/AWR - Scoping Comment #14:** There is no information in the scoping notice about how much of this landscape has been previously logged, and burned by fire, or salvage of burned forests. It would be nice to have maps of these areas. Also, maps of the various treatments that have occurred for fuels reduction {4200 acres), prescribed burns {2700 acres), mastication and burning {342 acres) should be included in the analysis.

**NEC/AWR- October 26, 2018 EA Comment #2:** There is no analysis, including mapping, of past "" recent projects in the Threemile Project Area.

The EA at page 31 identifies a number of relatively large management actions that have occurred in the project area. These include a 4,270 acre treatment project to remove understory trees up to 8 inches dbh from 2009-2011, with approximately 15% of this acreage actually being treated. The EA also identifies at page 32 that past thinning of hazardous fuels reduction has occurred on 3,458 acres since 2009. These brief notations are all that the EA ever notes for what are clearly significant recent impacts on vegetation in the project area, or wildlife habitat. It is unclear why the agency failed to define and map these impacts in the Threemile EA. The National Environmental Policy Act (NEPA) is quite clear that analyses of cumulative impacts for public benefit requires more than a mere listing of past projects. Without any specific information on these significant past vegetation treatments in the project area, it is impossible for the public to understand how the current proposal fits in with overall agency management of these public lands. A revised, updated NEPA analysis needs to be provided to the public that includes this essential information, including proximity and/or relationship of past treatments to the currently-proposed treatments.

**Forest Service Response:** At page 2 of the Scoping document in the Existing Condition section it is disclosed that "Approximately 12,136 acres (37%) of the NFS lands in the project area is currently forested with ponderosa pine. The remaining 20,788 (63%) is made up of transitional forest, riparian corridors/woody draw bottoms (green ash, shrubs), open grasslands, juniper, shrub land habitat, and areas of sparse vegetation or badlands. Grazing and wildfire have been the most significant disturbance processes on the landscape in the recent past. Wildfire has been the most significant disturbance process (22,500 acres) affecting forest cover. Recent management (since 2009) includes about 2,700 acres of prescribed fire (forest and non-forest) in combination with about 4,200 acres of hazardous fuels thinning, and 342 acres of mastication to alter the fuel complex in preparation of the prescribed fire. Commercial harvest activities have not occurred in the project area since 1989 (235 ac). Fire suppression has occurred over the last hundred years and continues today. The northern half of the project area has had multiple large fires since 2000 and currently is in various stages of forest recovery. These fire areas currently have approximately 1,027 acres of forest cover. Previously forested areas are non-forested (827 acres) or are in a state of reforesting (4,241 acres) within the fire perimeters. Lack of seed source, post-wild-fire has kept the forest cover from returning.

The cumulative effects analysis considering past, present, and reasonably foreseeable future actions is briefly described in the EA Environmental Consequences section for of the resource areas and further analysis and conclusions about the potential effects, including cumulative effects are available in the Resource Specialist Reports and other supporting documentation located in the project record. *Past Actions* are addressed by the Council on Environmental Quality (CEQ) 1/ in the following manner, “Generally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions. 2/. In other words, the effects of all past actions have created the current affected environment/existing condition, consequently specific past actions do not need to be identified for the cumulative impacts analysis. However, in general, past actions include grazing, timber harvest, pre-commercial thinning, planting, recreational camping, outfitting and guiding, prescribed burning (pile and broadcast), incidental firewood cutting.

*Present Actions* are typically on-going activities and are treated similarly to past actions. Anticipated future changes in these activities are included under reasonably foreseeable actions.

*Reasonably Foreseeable Actions* are those which are formal proposals or decisions not yet implemented at the time of the analysis. Activities that add to the effects of the proposed action include wildfires, timber harvest, planting, fuel reduction, livestock grazing, and recreational uses (hunting).

Past, present and reasonably foreseeable actions considered in the effects analysis, including cumulative effects, for the Threemile Restoration and Resiliency Project are listed in the EA at pages 30-32.

Footnote 1/ CEQ is the agency responsible for promulgation of regulations and guidance for the National Environmental Policy Act.

Footnote 2/ CEQ’s June 24, 2005 Memo.

Please refer to the draft Decision Notice and Finding of No Significant Impact (draft DN/FONSI), Alternative B is responsive to meeting the objectives identified in purpose and need for the project (draft DN/FONSI. Alternative B – Modified Proposed Action was developed in accordance with and, therefore does not threaten to violate any Federal State or local laws or requirements for the protection of the environment (i.e. Endangered Species Act; National Historic Preservation Act; Migratory Bird Act; Clean Water Act; Clean Air Act; Multiple Use, Sustained Yield Act; and the National Forest Management Act). Discussion in the EA of effects and the related reference in the project file document (Regulatory Framework sections for each resource area in the respective resource report) that this project will not adversely affect soils, water quality, or threatened or endangered species. Alternative B is also consistent with the Custer National Forest Land and Resource Management Plan (1986), the Responsible Official has found that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared, nor is an amendment to the Forest Plan needed. (draft DN/FONSI at pages 11 and 18). Also see the Forest Service Response: to

comment NEC/AWR Scoping comment #9, regarding whether a Forest Plan amendment was needed.

**NEC/AWR- October 26, 2018 EA Comment #3:** The notice for release of the EA did not include all the proposed treatments, which are basically for range management; the inclusion of prescribed burning for range management in this project was never clearly identified to the public.

The October 31, 2018 letter announcing availability of the EA for the Threemile Project noted that Alternative A includes 4,759 acres of forest treatments, while Alternative B includes 4,493 acres of forest treatments. What was not included is that Alternative A also includes 1971 acres of rangeland burning, while Alternative B includes 1508 acres of rangeland burning (see Tables 3 and 5 in EA). For example, the EA at 99 notes that burning will benefit the range by reducing conifers, especially in timbered units; it will provide transitory forage for livestock; burning will increase forage for cows and improve livestock distribution. The EA at 102 notes that burning will benefit rangelands and increase transitory range for cattle by 6000 acres. The EA at 103 notes that fire is recognized as a primary means for grassland management.

The combination of range and forest treatments as per impacts on wildlife are never evaluated in the EA. This lack of analysis is, important, because there are direct conflicts between managing for livestock (promote grass) and managing for wildlife, including management indicator and sensitive species (e.g., promote hiding cover, elk security, goshawk, Clark's nutcracker and loggerhead shrike habitat). The tradeoffs between managing for cows and wildlife are never addressed in the EA, so the public is not even aware that many of the proposed treatments are to benefit cows, not wildlife.

**Forest Service Response:** The Environmental Assessment (EA) for the Threemile Restoration and Resiliency Project was made available for review for two 30 day notice and comment periods. The first legal notice was published on October 26, 2018. On October 30, the Forest Service was notified by Dick Artley via email asking if the email address for comments was correct as it was prefaced by an FS [-comments-northern-custer-ashland@fs.fed.us](mailto:-comments-northern-custer-ashland@fs.fed.us) and Mr. Artley had not seen the email address identified in that way before. We quickly corrected the legal notice with the proper email address and that legal notice was published in the paper of record on November 2, 2018. The second time the Threemile Restoration and Resiliency Project EA was made available for 30 day notice and comment because the legal notice announcing the November 2 to December 3 comment period was not posted to the Forest's web page within the statutorily required four days after publication in the Billings Gazette. Therefore, the EA was being made available, again, for 30 day notice and comment period, and the legal notice was published to the project web page within the designated timeframe. We notified commenters that any comments submitted during the November 2 to December 3, 2018 comment period did not have to be re-submitted and would be included as part of the record. This second comment period closed January 7, 2019. Each of the legal notices announcing the availability of the EA for 30 day notice and comment met the regulatory content requirements as specified at:

36 CFR 218.24(b). *Content of legal notice. All legal notices shall include the following: (1) The title and brief description of the proposed project or activity. (2) A general description of the proposed project or activity's location with sufficient information to allow interest public to identify the location. (3) When applicable, a statement that the responsible official is requesting and emergency situation determination of it has been determined that an emergency situation exists for the proposed project or activity as provided for in §218.212. (4) For a proposed project or activity to be analyzed and documented in an environmental assessment (EA), a statement that the opportunity to comment ends 30 days following the date of publication of the legal notice in the newspaper of record (see 218.25(a)(2); as newspaper publication dates may vary, legal notices shall not contain the specific date. (5) For a proposed project or activity that is analyzed and documented in a draft environmental impact statement (EIS), a statement that the opportunity to comment ends 45 days following the date of publication of the notice of availability (NOA) in the Federal Register (see 218.25(a)(2)). (6) A statement that only those who submit timely and specific written comments regarding the proposed project or activity during a public comment period established by the responsible official are eligible to file an objection. (7) The responsible official's name, title, telephone number, addresses (street, postal, facsimile, and email) to who comments are to be submitted and the responsible officials office business hours for those submitting hand-delivered comments (see 218.25(a)(4)(ii). (8) A statement indicating that for objection eligibility each individual or representative from each entity submitting timely and specific written comments or verify identity upon request. (9) The acceptable format(s) for electronic comments. (10) Instructions on how to obtain additional information on the proposed project or activity.*

In letters dated October 26, 2018, October 31, 2018, and December 3, 2018, people were notified that an Environmental Assessment for the Threemile Restoration and Resiliency Project was available for public review during a 30 day notice and comment period. The letters were mailed to correspond with the upcoming publication of the legal notice in the Billings Gazette, the paper of record. There is no content requirement for the letter(s).

The Threemile Restoration and Resilience Project is not a range management project.

The Scoping document at pages 2-4 briefly describes the existing conditions in the project area, noting, in part, that several large fires have been near or adjacent to the project area. The EA and Scoping document note in the Desired Conditions section that *Wildfires across the District totaling 380,000 acres- a portion of these being uncharacteristically large and severe- in the last 20 years. Of those acres, 290,000 burned in 10 large fires from 2000 to 2017. Further noting These fires have reduced the extent of forest cover across the district. Figures 1 and 2 [in the Scoping document and EA] illustrate the changes in forest cover since 1995 to 2012 post fire. The long-term Forest Plan Forest-wide and Management Area direction is to have a mosaic of resilient forest cover and re-establish forest cover across the Ashland District where it has been lost due to extensive wildfire mortality. As noted, this is consistent with the Forest Plan, as well as the Multiple Use Long-term Sustained Yield Act (1960), and the National Forest Management*

*Act, as amended (1976).* The purpose and need identifies restoring ponderosa pine ecosystems towards a more heterogeneous forested landscape with a diverse age and size structure (including old growth), understory structure and composition, patch size, and pattern that are resilient to natural disturbances (e.g. fire, insect/disease, climate change) (EA p. 3, 5).

The Scoping document then notes at page 7 *In light of the conditions and stressors described above the desired condition is to manage for a heterogeneous forested landscape with a diverse age and size structure that includes old growth, understory structure and composition, patch size, and pattern. Non-forested areas (native grasslands and upland shrub dominated communities) would be managed for diverse native species composition and structure, as well. Creating a pattern of these diverse vegetative structure and species assemblages across the landscape will be more resilient to natural disturbances such as, fire, drought, insects, disease, climate change, and herbivory.*

Ponderosa pine will still persist as the dominant forest cover type across the landscape after treatment, with some understory. With Alternative B, the forest canopy in treated areas would greatly decrease, which includes the horizontal and vertical configuration of ladder fuels. This changes the fuel model from heavier fuels and/or ladder fuels to more of a grass understory model. (EA at p. 53; Fire & Fuel Management Report, p. 46, project record).

Alternative B would treat 4,407 acres of forested stands and increase the amount of fuel models that are considered non-lethal, or dominated by grass, from 63 percent (existing) to 76 percent (25,195 acres). This is within a small percentage of Alternative A's resulting open landscape of 77 percent. In essence, all treatments (commercial harvest, thinning, or prescribed fire) are designed for treated stands to maintain, or transition to, Fuel Model 2, which is open canopy pine stands with a grass understory. Again, this is done by removing ladder fuels of mostly pine and juniper, and reducing canopy covers by removing large trees. (EA at p. 53; Fire & Fuel Management Report, p. 47, project record).

Fuel removal by harvest and/or prescribed burning is expected to modify fire behavior under forested canopies. The chance of fire spread from surface to aerial fuels would be greatly reduced by thinning out the understory tree regeneration and elevating the canopy base heights. Following implementation of Alternative B, the stands will become more open and less dense with very little fuel ladder development. There may be an increased fine fuel grass component, which generally causes more rapid fire spread (ie. 6 chains to 30 chains/hr. as previously shown, but highly dependent on wind). Potential surface fires will likely have lower heat intensities, burn less severely, and result in lower tree mortality than is experienced in fires that burn in a torching or crowning manner. (EA at p. 53; Fire & Fuel Management Report, pp. 47-48, project record).

But, once the fire is large and moving in extreme conditions, firefighter Forest Service Response: is often the same in the Ashland area. That is, firefighters get to a grass Fuel Model 1 or Fuel Model 2, supplemented by a road, or equipment line, and hold the fire at those points, mostly by burning out the fuels between the lines and the main fire. Across the whole Threemile landscape, 76 percent of the area would have a more open fuel model with Alternative B, providing that tactic opportunity to firefighters during extreme conditions. This often provides

the most safety and firefighter escape potential. (EA at p. 55; Fire & Fuel Management Report, at p. 49, project record).

Changes to forage distribution from prescribed burning will increase available quality and quantity of forage for big game in the short term with cover and security returning, with increased levels, within 10-40 years post treatment due to the decommissioning of 2.1 miles of road. Mitigations, such as road buffers, aim to offset the short-term reductions in security and cover (Wildlife Report at pages 32-33). The effects of forest management to goshawk nesting habitat are analyzed and follow R1 guidelines to protect known nests and provide for 240 acres of nesting habitat for each 5,000 acre home range. A no disturbance buffer around the known nest with an additional 420 acre buffer, with timing restrictions, was center on the nest to reduce disturbance from all project activities. In areas outside of the know goshawk next area, foraging habitat is not expected to be further impacted by the addition of prescribed burning (Wildlife Report at pages 25-27). Clark's nutcrackers are ponderosa pine dependent and treatment will reduce available nesting habitat and forage however it will return the stands within the project area to a more historic forest structure and reduce the potential for high intensity wildlife that would remove ponderosa pine from the project area. Finally, Clark's Nutcrackers are not known to occur within the project are and are rarely (<1 observation annually since 2002) observed on the district while effects to the species habitat is expected to be negative in the short to moderate time periods, effects to the species are negligible (EA at pages 63 and 70-71; Wildlife Report at pages 12, 34-36). Loggerhead shrike are grassland dependent and utilize areas with open landscapes and riparian areas where available. Effects to the species from project activities are expect to be positive as abundance of grassland habitat is expected to increase and prescribed burning activates will create a grassland mosaic across the habitat, creating a variety of foraging and nesting habitat while the creation of a more open forest structure will encourage shrub growth for nesting (EA at pp. 63 and 70-71; Wildlife Report a pp. 34-36.).

**NEC/AWR- EA Comment #4:** The purpose of the logging is to promote the new sawmill in Ashland, but the purpose of burning up ponderosa pine forests is a jobs program for the Forest Service.

Alternative A would result in the prescribed burning of 2065 acres of ponderosa pine forest, while Alternative B would result in burning of 1,539 acres of ponderosa pine forests (see Table 6 of EA). As noted in the EA at 35, these burning treatments in forests are designed to have small reductions in the overstory with high reductions in the understory. With current conditions due to past fires, forest habitat is already limited to 12, 137 acres in the project area, which is only 3 7% of the project area. A minimum of at least 40% hiding cover is recommended by the current best science for big game species. For Alternative A, logging of 2,681 acres will reduce hiding cover from 3 7% down to 29% (9456 acres), while burning forests will reduce hiding cover on another 2065 acres, or bring hiding cover to 22% (7371 acres). For Alternative B, logging would reduce hiding cover by 2941 acres, reducing it from 3 7% down to 28%. Additional forest burning of another 1,539 acres will reduce hiding cover to 7657 acres, or only 23%. Thus the burning of forests for fuels management will create a significant additional loss of hiding cover for big game. The EA at 68 states that hiding cover for big game will be reduced down to 27%, which

apparently did not include the loss of cover from prescribed burning of forest. However, no actual information was provided on how this figure was derived.

These estimates of hiding cover for big game are likely high above on-the-ground levels, as many stands currently probably lack of dense understories required for hiding cover. The standard definition of hiding cover is to conceal 90% of an elk within 200 feet, which requires ground-level cover. Removing the understory of forests will eliminate much of this cover. Even by the modified definition of hiding cover identified in the Gallatin Forest Plan Amendment, a stand requires a minimum of 40% canopy cover to qualify as hiding cover. As is noted in the EA at page 5, only 40% of the forested areas in the project area have a canopy closure of 40% or greater. This would be 4855 acres of such forest, or 15% of the forested habitat. Thus the retention of a dense understory in all stands that are currently providing hiding cover, as well as a 40% or greater canopy cover in those stands that lack a dense understory, will be essential for providing hiding cover for big game species. The EA at page 68 states that hiding cover for wildlife will be reduced to 27%, but it is not clear how this figure was derived.

**Forest Service Response:** As described in the Scoping document at page 8, at page 5 in the EA, and at pages 1 and 5 of the draft Decision Notice and Finding of No Significant Impact (draft DN/FONSI), one of the purposes of the project is to: *Provide wood products to contribute to employment and industry in local communities and help support the sustainable supply of timber from National Forest System lands.* One of the reasons the Responsible Official is proposing selecting Alternative B, is because it would meet one of the purposes of the project, that of providing wood products to contribute to employment and industry in local communities and help support the sustainable supply of timber from National Forest System lands. (draft DN/FONSI at p. 5). This is consistent with the Forest Plan, as well. (USDA 1986, p. 5).

The Scoping document at pages 2-4 briefly describes the existing conditions in the project area, noting, in part, that several large fires have been near or adjacent to the project area. The EA and Scoping document note in the Desired Conditions section that *Wildfires across the District totaling 380,000 acres- a portion of these being uncharacteristically large and severe- in the last 20 years. Of those acres, 290,000 burned in 10 large fires from 2000 to 2017. Further noting These fires have reduced the extent of forest cover across the district. Figures 1 and 2 [in the Scoping document and EA] illustrate the changes in forest cover since 1995 to 2012 post fire. The long-term Forest Plan Forest-wide and Management Area direction is to have a mosaic of resilient forest cover and re-establish forest cover across the Ashland District where it has been lost due to extensive wildfire mortality. As noted, this is consistent with the Forest Plan, as well as the Multiple Use Long-term Sustained Yield Act (1960), and the National Forest Management Act, as amended (1976).* The purpose and need identifies restoring ponderosa pine ecosystems towards a more heterogeneous forested landscape with a diverse age and size structure (including old growth), understory structure and composition, patch size, and pattern that are resilient to natural disturbances (e.g. fire, insect/disease, climate change) (EA p. 3, 5).

The Scoping document then notes at page 7 *In light of the conditions and stressors described above the desired condition is to manage for a heterogeneous forested landscape with a diverse age and size structure that includes old growth, understory structure and composition, patch*

*size, and pattern. Non-forested areas (native grasslands and upland shrub dominated communities) would be managed for diverse native species composition and structure, as well. Creating a pattern of these diverse vegetative structure and species assemblages across the landscape will be more resilient to natural disturbances such as, fire, drought, insects, disease, climate change, and herbivory.*

Ponderosa pine will still persist as the dominant forest cover type across the landscape after treatment, with some understory. With Alternative B, the forest canopy in treated areas would greatly decrease, which includes the horizontal and vertical configuration of ladder fuels. This changes the fuel model from heavier fuels and/or ladder fuels to more of a grass understory model. (EA at p. 53; Fire & Fuel Management Report, p. 46, project record).

Alternative B would treat 4,407 acres of forested stands and increase the amount of fuel models that are considered non-lethal, or dominated by grass, from 63 percent (existing) to 76 percent (25,195 acres). This is within a small percentage of Alternative A's resulting open landscape of 77 percent. In essence, all treatments (commercial harvest, thinning, or prescribed fire) are designed for treated stands to maintain, or transition to, Fuel Model 2, which is open canopy pine stands with a grass understory. Again, this is done by removing ladder fuels of mostly pine and juniper, and reducing canopy covers by removing large trees. (EA at p. 53; Fire & Fuel Management Report, p. 47, project record).

Fuel removal by harvest and/or prescribed burning is expected to modify fire behavior under forested canopies. The chance of fire spread from surface to aerial fuels would be greatly reduced by thinning out the understory tree regeneration and elevating the canopy base heights. Following implementation of Alternative B, the stands will become more open and less dense with very little fuel ladder development. There may be an increased fine fuel grass component, which generally causes more rapid fire spread (ie. 6 chains to 30 chains/hr. as previously shown, but highly dependent on wind). Potential surface fires will likely have lower heat intensities, burn less severely, and result in lower tree mortality than is experienced in fires that burn in a torching or crowning manner. (EA at p. 53; Fire & Fuel Management Report, pp. 47-48, project record).

But, once the fire is large and moving in extreme conditions, firefighter Forest Service Response: is often the same in the Ashland area. That is, firefighters get to a grass Fuel Model 1 or Fuel Model 2, supplemented by a road, or equipment line, and hold the fire at those points, mostly by burning out the fuels between the lines and the main fire. Across the whole Threemile landscape, 76 percent of the area would have a more open fuel model with Alternative B, providing that tactic opportunity to firefighters during extreme conditions. This often provides the most safety and firefighter escape potential. (EA at p. 55; Fire & Fuel Management Report, p. 49, project record).

**Johnson, Sarah Jane NEC, Comment #4:** While an estimate of 40% of horizontal cover was recommended to account for hiding cover for big game, both MTFWP and the USFS recommend managing for cover within the natural range of variation. Many of the studies used to estimate hiding cover were estimated on the western side of the state and may not adequately represent the requirements for the Ashland Ranger District. Local knowledge of big game populations and the District was provided by MTFWP (DeVore) stating that 40% is likely outside the natural

range of variation and that big game continue to thrive outside of those conditions. Dramatic cover reductions occurred in 2012 with the presence of large scale wildfires and big game population, especially those requiring cover, have continued to increase (MTFWP, 2018). Project activities would reduce hiding cover to approximately 27%, similar what has been seen on the district and has been shown to support increases of big game populations. Studies by Canfield (2011) demonstrated that burned stands with 40% canopy cover were sufficient to provide hiding cover so prescribed burn treatments within forested areas are not expected to significantly reduce hiding cover. (Wildlife pp 27- 33)

**NEC/AWR - Scoping Comment #22:** There is no information on the goals for old growth habitat. The current best science recommends 20-25% of the landscape be provided as old growth. What is the expected strategy in the project area? Will existing old growth be mapped?

**NEC/AWR- EA Comment #5:** There is no valid old growth management strategy for this landscape.

There is no valid old growth management strategy for this landscape.

The EA notes that some scattered large, old trees may be protected if located within harvest units. A few large old trees, or small patches of old trees, do not constitute old growth. As an example, brown creeper management includes a recommendation for large unbroken tracts of 250 acres of older forest. For the northern goshawk, management recommendations include 20% old growth within a 6,000 acre home range. The EA fails to identify that there will be no effective management of old growth for wildlife, and as a result, continued management as proposed for the Threemile project will have significant adverse impacts on old growth forests and associated species. Once the several thousand acres of forest are logged, and up to another several thousand acres burned to remove the understory, the ability of this landscape to provide any larger tracts of old growth either currently or in the future will be eliminated. This is a significant effect.

**Forest Service Response:** The purpose and need identify restoring ponderosa pine ecosystems towards a more heterogeneous forested landscape with a diverse age and size structure (including old growth), understory structure and composition, patch size, and pattern that are resilient to natural disturbances (e.g. fire, insect/disease, climate change) (EA p. 3, 5). The Northern Region uses 1992 Green et. al. *Old-Growth Forest Types of the Northern Region* to access and determine old growth. Field inventory did not detect any large stands of old growth in the project area (Field Data A, scanned field sheets; Silviculture Report pp. 15 - 16). The EA states no old growth stands were found however, small microsites (< 1 acre and generally less than 1/2 acre in size) were detected that met minimum attributes of old growth for age, diameter, and basal area (EA p. 19). It further states which Units they occur in (EA p. 19). The forest recognizes the importance of old, large trees and has specifically created a design criterion to ensure these small areas that have trees meeting the old growth attributes are marked as leave trees and that any others/areas found during implementation will be assessed and prescriptions modified to ensure old growth attributes are maintained (EA p. 20). The EA also indicates that individual large trees ( $\geq 17$  inches and  $\geq 180$  years old will be marked as leave trees if not a safety hazard and serve as

replacement snags and prior to burning fuel accumulation will be pulled back as needed for protection (EA p. 19). An issue identified during project management was promotion of large tree development on the landscape (Silviculture Report, pg. 1). Inherent in the commercial treatment prescriptions is thinning from below which will promote various densities of large ponderosa pine on the landscape (EA Table 1, pg. 9 -10). This will allow for stands of larger/older trees in the future (Alt A pp. 28-32, 46-47, 51-52, 82-84, 86; Alt B pp. 60-62, 70-71, 72-73, 76-78, 82-84, 86. Promoting acres of various densities of large pine trees are displayed in the Silviculture Report (Table 19, p. 39 and Table 41, p. 68).

Trees that qualify as “old growth” are rare on the Ashland Ranger District and due to the high fire disturbance regime and dry conditions, stands of old growth are likely outside of the Natural Range of Variation for this landscape (Silviculture pp 16). However, in order to manage for species that require older aged stands, over 1000 acres of stands with at least 40% canopy cover and 10” diameter trees will be left within the project area after treatment. This habitat can serve as goshawk nesting habitat and will be left to continue to develop into more mature stands while being protected from intense fire disturbance (Wildlife pp 24-26).

**NEC/AWR - Scoping Comment #23:** The scoping notice indicates that key habitat characteristics will be maintained for species as the goshawk and white-tailed deer. What are these key habitat features, where are they in the project area, and how will they be maintained?'

**NEC/AWR- EA Comment #6:** There is no valid management of the goshawk in this landscape, which is a significant adverse impact if it is eliminated due to agency management actions.

The management of the goshawk in this project area is limited to some protection of the post fledging area (PFA). However, levels of mid- to old forest within the existing PF A will be reduced below recommended levels with either alternative, from 69% to 42-50%, while the recommendation is at least 60% as per the current best science for ponderosa pine forests. It appears that this existing goshawk territory is still functional, in spite of the large loss of forest habitat to the north with fires. It also appears that there is only one active goshawk territory in this project area, while historically there were up to 5-7. So there are already significant adverse impacts on the goshawk population in this project area, and the proposed actions will create severe additional reductions of habitat. In addition the reduction of mid-to old forests within the PF A, goshawk foraging habitat will be eliminated and/or reduced on all logged acres, and in many cases, in burned forests as well, due to the removal of understory vegetation. Both types of actions in forests will impact a key prey species of goshawks, or red squirrels. Also, woodpecker populations will be severely reduced with logging. The impact on goshawk foraging habitat is only indirectly noted by calling it nesting habitat (nesting and foraging habitat are generally the same habitat, although nesting habitat may be more dense). The EA notes that out of 334 7 acres of nesting habitat in the project area, up to 2312 or 69% of it will be removed with logging. The EA does not even address this huge loss of goshawk foraging habitat for this remaining territory. It appears highly likely that this remaining active territory will be eliminated with this project, with red-tailed hawks replacing goshawks as the resident raptor species. It is well established that removal of forest habitat increases habitat for the red-tailed hawk why removing habitat for the goshawk. This impact is never addressed in the EA.

## **Forest Service Response to NEC/AWR Scoping Comment #23 and NEC/AWR EA**

**Comment #6:** Goshawk and whitetail deer are identified as management indicator species whose habitats are analyzed in detail in the Wildlife Report contained the project record (EA at p. 57). As discussed in the EA at page 65, proposed changes in vegetation characteristics including: cover, structure, spatial distribution, and interspersions, may affect wildlife species use in the Threemile Project area. Effects of the proposed action and alternatives are discussed separately in [the Wildlife] report for each species and/or their habitat as identified in Table 12 in the EA and Table 2 in the Wildlife Report, project record. Predicted effects on wildlife habitat by proposed treatments were evaluated using Geographic Information System (GIS) tools in the program ArcMap 10.2 (ESRI 2011). These tools were used to estimate current, post-treatment, and future conditions. (Wildlife Report, page 14, project record).

As described further in the Wildlife Report at page 22, goshawk is the Custer National Forest's indicator species for old growth timber (p. 18, Forest Plan, USDA 1986). The Forest Plan defines old growth timber, but does not define old growth forest (USDA, 1986, p. 136). Therefore, the Forest uses Region One's definition of old growth as documented by Green et al. (2007). Thus defined, old growth in ponderosa forests on the eastside of Region 1 are characterized by single or multi-storied canopy, minimum age of largest trees is 180 years,  $\geq 4$  trees/acre with dbh  $> 17$  inches, and a basal area  $\geq 40$  ft<sup>2</sup>/acre (Green et al. 2007). The existing condition of goshawk habitat on the Ashland Ranger District is described at pages 22-24 in the Wildlife Report. The methodology used for analyzing the effects of the proposed actions to goshawk habitat is described in the Wildlife Report at pages 24 and 25. The project wildlife biologist used the FS Region 1 document produced in 2009, titled *Northern Goshawk Northern Region Overview* (Brewer, et al. 2009) (referred to herein as "Overview"), which summarized existing knowledge about goshawk habitat needs, provided a consistent approach for analyzing available goshawk habitat, and listed other management considerations that need to be considered during project planning and analysis. The Overview described methods to classify goshawk habitat at multiple-spatial levels and provided a consistent methodology to classify PFA, foraging, and nesting habitat. The Northern Region Overview was used to provide the basic framework and models for this analysis. Further Forest level guidance in 2016 clarified nesting habitat constraints based on updated modeling efforts.

The one active goshawk territory is the only territory that has been recorded in the Threemile project area despite surveys conducted by the Montana Natural Heritage program in 2005 and 2014. While one breeding observation was made during a 2014 survey, that bird was approximately 0.5 miles from the known nest (MTNHP 2018, Wildlife pp 22-24). Given this distance, it is likely that the bird is inhabiting that same territory but may be at an alternate nest (estimated 1,400-8,650 acre territory). Based on the size of the project area, the habitat available, and the size of goshawk territories, it is estimated that project area could, at most, support 4 territories. While effects from 2012 wildfires may have impacted as many as 7 territories, across the district approximately 53,964 acres of nesting habitat are still available (Wildlife pp 22-24).

Habitat used for PFA varies widely across habitats and vary with local conditions such as habitat composition, disturbance, prey availability, and risk of predation (Squires and Kennedy 2006).

Treatment within the PFA will reduce the amount of continuous forested vegetation within the PFA but with a variety of treatments (timber harvest, prescribed burn, and both) help to create a mosaic habitat that has wide utility for fledglings. Recommendations for canopy cover are not met within the project area before or after treatment and the known PFA would fall below the 37% from Brewer's (2009) regional analysis. However an Eastside analysis of goshawk nests found that only 4% of nest stands met the regional nest model and that vegetation attributes measure in plots around trees also differed from the regional model (Bush et al 2012) suggesting that regional recommendations for goshawk may not apply to eastside forests. (Wildlife 24-27)

While foraging habitat and species available for foraging may change with treatment, goshawks have shown to be generalist predators feeding on tree squirrels, ground squirrels rabbits, songbirds, woodpeckers and grouse relying on both forested and non-forested habitats (Squires and Reynolds 2007, Squires and Kennedy 2006). The additional mosaics and disturbance caused by treatment is expected to reduce the availability of some types of prey species while increasing others overall maintaining sufficient foraging opportunity. The nest buffer around the known nest within the project areas was specifically placed to include the nest and adjacent water features that showed evidence of use and likely foraging activity (Wildlife 24-27).

Potential impacts to goshawk including the alteration or reduction of nesting and foraging habitat and disturbance during breeding may impact goshawk utilizing the project area. The population across the Custer Gallatin National Forest and the Region will meet and exceed the threshold to maintain a viable regional population (Brewer et al. 2009) (Wildlife 27).

For whitetail deer and big game habitat see the Forest Service Response to NEC/AWR EA Comment #7, and EA Comment #8, below.

**NEC/AWR- EA Comment #7:** The EA does not define what the level of big game habitat effectiveness currently is, or what it would be during project implementation.

There is good science available where the displacement impact of disturbance on elk can be measured during the summer. In spite of a huge increase in new roads required for this project, including up to over 28 miles, there is no actual information provided in the EA in regards to the displacement level, or habitat effectiveness that will occur as a result of these new and existing roads. It is not even clear that active motorized routes are considered a displacement effect to big game if the road is not open to public travel. The agency is clearly concealing the adverse impact this project will have on big game by failing to disclose the huge loss of habitat effectiveness that will be triggered. In addition to the new roads, a huge number of existing roads will have to be reconstructed, or have significant improvements made. These roading impacts will add to the construction of new roads. There will clearly be a significant loss of big game habitat effectiveness in the summer season, an impact that alluded to but never quantified in the EA.

**Forest Service Response:** Habitat effectiveness is discussed in the EA at pages 68-70 and is analyzed within the project report concluding that habitat effectiveness will be reduced during project activities in the short term, especially during project activities, and until cover can regenerate within 10-40 years. While big game within the project area may be displaced until the temporary roads for project work are decommissioned, there are large portions of the project

area that remain effective habitat, providing opportunities for displacement (Wildlife 47-49). Table 9 shows that for alternatives A and B habitat that is no longer effective will increase from 6% to 27%-30% leaving over 70% of habitat available for use, exceeding the recommendation of 50% habitat use potential. Roads that are not open to the public were excluded from habitat effectiveness analysis based on literature the suggested elk do not avoid infrequently used routes (R1 Assessment) After project activities, habitat effectiveness will increase as 2.1 miles of road will be decommissioned. In order to reduce the impacts of roads on big game, a road buffer of 75 feet was recommended along major motor ways. (Wildlife 28-33). The agency disclosed the scientific basis for the analysis and conclusions and the commenter did not provide alternative science for the agency to consider.

**NEC/AWR- EA Comment #8:** The objective of maintaining elk security in the project area will not be met, but the significance of this impact is never analyzed for the public.

The project area is important for public recreation, including hunting. The proposed project will have a huge negative impact on public hunting opportunities due to both extensive removal of hiding cover, and extensive construction of new roads. Even after new roads are closed, it can be assumed that most will still receive walk-in use by hunters. And as is noted in the EA at 24, elk security is defined as a contiguous block of 250 acres of hiding cover at least 0.5 miles from an open motorized route. Even if roads are closed, an area will no longer qualify as security if there is no hiding cover. Without hiding cover, elk will not remain in these areas, including clearcuts, during the hunting season. The EA does not provide any quantitative analysis of either what the current level of elk security is within this landscape, or how it compares to the recommended minimum of 30%. This level is likely too low in this type of landscape that is largely open, with forest stands occurring as scattered mosaics. There are no maps provided as well, for current security areas, where these will be during project completion, or afterwards. The issue of security is clearly essential to the NEPA analysis of this project, as a major objective is to directly reduce the quality of hiding cover within forests with logging, to reduce hiding cover with burning, and to prevent more open areas from ever developing hiding cover. This project is in direct conflict with maintaining elk security, and this needs to be fully identified and justified to the public. It also needs to be noted that this project will have a huge adverse significant impact on elk security.

**Forest Service Response:** Security is the combination of several factors (vegetation, geography, and topography) that allow game to remain in an area under hunting stress. The availability of secure habitat influences game displacement from public lands and to marginal habitats. The major impacts to secure habitat occur from road use by hunters. Security is therefore measured by the amount of land available to game that occurs at least 0.5 miles from a road in areas of 250 acres or more. Hills et al. recommends at least 30% of an area to be secure habitat with areas being evenly distributed throughout. Due to the density of roads, security habitat is sparse throughout the Ashland Ranger District but does meet recommendations with a third of habitat being considered secure. This is displayed in table 8 which shows the amount of secure and non-secure habitat across the District and in the project area before, during, and after activities.

However, the topography across the district can block roads and road noises and deterring hunters from elk, adding to secure habitat (DeVore pers. Comm. 2018). Across the district, administrative roads exist and are used intermittently by permittees and Forest Service employees, but use is generally not high enough to be included in security analysis. Security will be reduced during project activities however it will increase after project activities are complete and all roads are decommissioned. In order to mitigate for reductions in security, habitat effectiveness, and cover it is recommended to retain at least 75' of hiding cover along open travel plan roads. (EA at pp. 68-70; Wildlife Report at pp. 28-33, 43-46).

**NEC/AWR- EA Comment #9:** The long-range management strategy for sensitive species, such as Montana Species of Concern, is never identified in the EA; the direct conflicts with management of many of these species with the agency's fuels management strategy is therefore never disclosed to the public, as is required by the NEPA.

Logging will eliminate and/or reduce the ponderosa pine seed source that is important to the Clark's nutcracker. Burning will eliminate the ecotone areas of pine, juniper and sagebrush important to the Loggerhead shrike. Yet there are no habitat objectives identified for either of these species, as was previously noted for the brown creeper, an old growth species. Without applying any habitat objectives, removing habitat for the Clark's nutcracker and Loggerhead shrike could potentially have significant adverse impacts.

The EA did not disclose that local populations of either species will likely be significantly reduced as a result of this project.

The EA also failed to even discuss what the impact of this as well as past burning projects have had on both sagebrush and juniper species. The Brewer's sparrow is highly dependent upon sagebrush, and sagebrush provides important winter forage for mule deer and antelope, and in some cases, elk. As well, many species, including mule deer and the pinyon jay, are benefited by juniper and/or juniper berries as forage during the winter and as nesting substrate. The extent of the removal of juniper and sagebrush in this landscape is unknown, including on big game winter ranges.

In effect, much of this proposal is to improve grass for cows. This strategy requires removal of important habitat for a huge number of wildlife species. This conflict is never identified in the EA, and as such, the public has no idea of the adverse impacts that will occur to wildlife as a result. These significant adverse impacts to wildlife are never disclosed, in violation of the NEPA.

**Forest Service Response:** Clark's nutcrackers are ponderosa pine dependent and treatment will reduce available nesting habitat and forage however it will return the stands within the project area to a more historic forest structure and reduce the potential for high intensity wildfire that would remove ponderosa pine from the project area. Finally, Clark's Nutcrackers are not known to occur within the project area and are rarely (<1 observation annually since 2002) observed on the district while effects to the species habitat is expected to be negative in the short to moderate time periods, effects to the species are negligible (Wildlife pp 12, 34-36). Loggerhead shrike are

grassland dependent and utilize areas with open landscapes and riparian areas where available. Effects to the species from project activities are expected to be positive as abundance of grassland habitat is expected to increase and prescribed burning activities will create a grassland mosaic across the habitat, creating a variety of foraging and nesting habitat while the creation of a more open forest structure will encourage shrub growth for nesting (Wildlife 34-36).

The Threemile Restoration and Resilience Project is not a range management project. Rather, as described in the Scoping document at page 8, at page 5 in the EA, and at pages 1 and 5 of the draft Decision Notice and Finding of No Significant Impact (draft DN/FONSI), one of the purposes of the project is to: *Reduce fuel loads to enhance fire suppression capabilities by modifying fire behavior in the Threemile Restoration and Resiliency project area.* See also the Forest Service Response to NEC/AWR EA Comment #3 above.

Fuel removal by harvest and/or prescribed burning is expected to modify fire behavior under forested canopies. The chance of fire spread from surface to aerial fuels would be greatly reduced by thinning out the understory tree regeneration and elevating the canopy base heights. Following implementation of Alternative B, the stands will become more open and less dense with very little fuel ladder development. There may be an increased fine fuel grass component, which generally causes more rapid, fire spread (ie. 6 chains to 30 chains/hr. as previously shown, but highly dependent on wind). Potential surface fires will likely have lower heat intensities, burn less severely, and result in lower tree mortality than is experienced in fires that burn in a torching or crowning manner. (EA at p. 53; Fire & Fuel Management Report, pp. 47-48, project record).

Once a fire is large and moving in extreme conditions, firefighters move to a grass Fuel Model 1 or Fuel Model 2, supplemented by a road, or equipment line, and hold the fire at those points, mostly by burning out the fuels between the lines and the main fire. Across the whole Threemile Project landscape, 76 percent of the area would have a more open fuel model with Alternative B, providing that tactic opportunity to firefighters during extreme conditions. This often provides the most safety and firefighter escape potential. (EA at p. 55; Fire & Fuel Management Report, at p. 49, project record).

One of the reasons the Responsible Official is proposing selecting Alternative B, is because it would meet another of the purposes for the project, that of *reducing fuel loads to enhance fire suppression capabilities by modifying fire behavior in the project area.* (draft DN/FONSI at p. 5). This is consistent with the Forest Plan, as well. (USDA 1986, p. 5).

**NEC/AWR Scoping comment #3:** There is new science out about the suitability of dead trees as cavity trees, where only about 4% of dead trees are suitable for cavity construction. This science makes control of insects a violation of ecosystem management, since these control measures mean that songbirds needing cavities for nesting will be eliminated along with insects and disease. How will this program address this new science and viability of cavity-nesting wildlife?

**NEC/AWR- EA Comment #10:** The snag management strategy is scientifically outdated and will not maintain populations of associated species, including birds and bats.

Leaving several snags per acre, if present, was identified as a snag management strategy back in the 1970s. This strategy was identified even by the Forest Service in reports as early as 1997 that it would not maintain associated species. Current science on snags lends even stronger support for the invalid strategy of leaving several snags per acre in logged areas, since as few as 4% of snags will be suitable for cavity construction. The Forest Service claim that logging is needed to control for pine bark beetles is in direct conflict with provision of snags for wildlife. You can't have both. This conflict is never identified in the EA. The public is never told that the project will severely impact snag-associated wildlife due to both clearcutting and forest thinning, including both birds and bats. Currently, only a limited portion of this landscape (less than 40%) is providing snag habitat for a relative large number of dependent species. Reducing it further is clearly not consistent with maintaining these species. Once again, the EA does not identify the direct conflict that exists between the proposed project and wildlife, so the public is not aware of the severe negative impacts that will be created for wildlife.

**Forest Service Response:** The commenter did not provide any references related to this new science, and thus the Forest Service was not able to review and respond accordingly. However, we can explain what we anticipate the effects of the alternatives will be to dead trees/snags. The project is not a salvage project and the harvest or removal of dead trees is not the purpose of the project (see Purpose and Need in the EA at pages 3-8). Snags will be retained where they exist and do not pose a safety hazard. Technically there is no part of the proposal to “control insects”. Rather the intent in both action alternatives, in part, is to increase the resilience of forest stands to Mountain Pine Beetle (MPB) outbreaks, with the understanding there will always be insects and disease occurring in stands. Insects and disease are naturally a part of any stand. Fire and insects are the most common natural disturbances in the project area that have had or may have influence on the current condition of the forest vegetation. These disturbances are natural processes in forest vegetation landscapes and they can be large or small and occur on an individual tree basis. (EA at 9). See the EA at pages 6, 7, 9, 34, 35, 36, 38-39, and the Forest Vegetation Report at 28, 29, and 60 in the project record. See also the FinalStandDataByStrataVolume spreadsheets, in the project record, that show the numbers of dead trees/acre. As noted above, and as part of the design criteria for the project in the Forest Management and Wildlife sections, large trees and snags will be retained where they exist and do not pose a safety hazard (EA at pp. 5, 20, 23-24, 66, and the Forest Vegetation Report, as well as the Wildlife Report at p. 21, project record).

The project does not propose to remove dead trees, it is not a salvage project. Design criteria occur that provide for snag management and replacement snags (EA pg. 23 and 24). The purpose and need does not propose to beetle proof the forested landscape, beetles will always be present and continue to shape vegetation conditions in the project area (EA pg. 32-33 and Forest Vegetation Report p. 13). The purpose of the project is to lessen the potential spatial extent and intensity of high mortality from beetles (EA p. 3 and Forest Vegetation Report p. 1). Action alternatives post treatment and 20 years post treatment will still have large acreages in moderate and high beetle hazard (Table 52 Forest Vegetation Report).

Snag recruitment is expected to continue throughout the project area from low intensity fires, beetle kill and other natural causes of mortality will continue in the project area. The project does not aim to remove snags from the project area but to reduce the severity of fires to ensure the longevity of green stands which would ensure that snags are recruited on a long-term basis. Fires are frequent on the district and moderate to high intensity fires will continue outside of the project area and provide dense areas of snags for the snag-dependent species. (Wildlife pp 35-36) While snag densities within the project area may be affected by project work, snags will still be present and recruited from disturbances outside of the project area, providing snag habitat. Impacts to future snag recruitment and the habitat associated with dead and dying trees are expected to be reduced by the removal of trees but these effects are not expected to be significant to any species at the district or population level.

**NEC/AWR- EA Comment #11:** The management of bird species that required relatively dense, older forests was not ever identified or evaluated in the EA.

Based on monitoring of birds in Montana, there are over a dozen bird species that have been found to be largely associated with dense older forest habitats that are largely undisturbed. This is exactly the type of habitat the Forest Service in the Threemile project has determined should not be maintained on the landscape due to the fire and pine beetle risks. The EA failed to identify the direct conflict between the agency's proposed fuels management strategy with birds that require dense older forests that are identified as a fire risk. The EA completely ignored how these species of birds can be maintained on the landscape if the fuels management strategy is implemented. The public was never provided with the information about this conflict between bird conservation and fuels reduction. Basically, the agency needed to identify that they were making a choice between wildlife and wildfires, and they were choosing to manage for wildfire prevention even if it means there would be very limited populations of wildlife as a result.

**Forest Service Response:** Commenter did not identify bird species and how the analysis conducted by the FS failed to address the habitat needs. Trees that qualify as “old growth” are rare on the Ashland Ranger District and due to the high fire disturbance regime and dry conditions, stands of old growth are likely outside of the Natural Range of Variation for this landscape (Silviculture pp 16). However, in order to manage for species that require older aged stands, over 1000 acres of stands with at least 40% canopy cover and 10” diameter trees will be left within the project area after treatment. This habitat can serve as goshawk nesting habitat and will be left to continue to develop into more mature stands while being protected from intense fire disturbance (Wildlife pp 24-26).

See also the response to NEC/AWR EA Comment #5.

**NEC/AWR Scoping comment #9:** The scoping notice states that one of the decisions to be made is if this project requires a Forest Plan amendment. We agree that an amendment, requiring full public involvement and analysis of impacts, is required in order to make fuels reduction the primary management goal for this landscape, at the huge expense of wildlife. Currently, there is no direction in the Forest Plan that fuels management is to be the primary goal for this landscape.

This amendment clearly requires an environmental impact statement for a significant Forest Plan amendment.

**NEC/AWR- EA Comment #12:** The fuels management strategy for the proposed project is outside the current Forest Plan for the Custer portion of the Custer Gallatin National Forest.

As we noted in our scoping comments, the Custer's Forest Plan does not make fuels management the primary management strategy for any areas of this forest, including the Threemile Project Area. There has never been any programmatic analysis of the impacts that this type of fuels management strategy will have on forest wildlife. Until the Forest Plan is amended, this type of management strategy is a violation of the National Forest Management Act (NFMA).

**Forest Service Response:** As described in the draft Decision Notice and Finding of No Significant Impact (draft DN/FONSI), Alternative B is responsive to meeting the objectives identified in purpose and need for the project (draft DN/FONSI. Alternative B – Modified Proposed Action was developed in accordance with and, therefore does not threaten to violate any Federal State or local laws or requirements for the protection of the environment (i.e. Endangered Species Act; National Historic Preservation Act; Migratory Bird Act; Clean Water Act; Clean Air Act; Multiple Use, Sustained Yield Act; and the National Forest Management Act). Discussion in the EA of effects and the related reference in the project file document (Regulatory Framework sections for each resource area in the respective resource report) that this project will not adversely affect soils, water quality, or threatened or endangered species. Alternative B is also consistent with the Custer National Forest Land and Resource Management Plan (Forest Plan; USDA 1986), the Responsible Official has found that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared, nor is an amendment to the Forest Plan needed. (draft DN/FONSI at pages 11 and 18).

The Forest Plan (USDA 1986), as amended, has been incorporated by reference. The reader can find applicable Forest Plan forest-wide goals, objectives and standards for fire and fuels management at:

- p. 5. The Forest will use a cost-efficient fire protection and fuels management program that is responsive to the goals of the Forest, including cooperative efforts with other agencies and organizations.
- p. 18. 2) Scheduled management practices to improve wildlife habitat may include, but are not limited to, the following activities: a) Rejuvenation of plant species by prescribed fire.
- p. 18. 3) Project activities, especially earth-disturbing activities, will be evaluated for impacts to wildlife. Mitigation measure such as those listed below will be taken as applicable to meet the MA goals. (MA direction may define more specific measures.) h) Management activities, including prescribed fire, will be conducted to maintain or enhance the unique value associated within woody draws and riparian zones, as well as a variety of successional vegetative stages.

p. 23. 5) Non-Structural Range Improvements. c) Prescribed fire may be used for enhancement or maintenance of range forage productivity, palatability, and diversity for livestock and/or wildlife. Cooperators may use prescribed fire but only under Forest Service supervision.

p.23. g) Conifer encroachment control may occur where. (4) In rangelands where the invading trees are less than 3-feet high, prescribed fire may be the preferred treatment. Mechanical methods may be used in areas where trees are over 3-feet high, including removal for Christmas tree purposes.

p. 24. a. Timber Harvest -- Suitable Forest Land. 4) The utilization of small diameter material and sawlog by-products will be encouraged. Commercial harvest for firewood and other small products will be used to accomplish timber stand improvement where appropriate.

P.25. c. Firewood.. Refer to 1), 2), 3) for standards regarding firewood harvest and practices.

p. 38. In relevant part under b. Fire management. (5) Consideration of natural fire cycles, in fire-dependent and/or fire-related ecosystems when assigning appropriate suppression responses or when preparing resource management prescriptions.

P. 39. In relevant part under 4) Fuels Management.

a) A combination of treatments will be used that will most efficiently meet the fuels management direction of each management area. The Forest will consider the use of prescribed fire, using both planned and unplanned ignition as a management tool. Unplanned ignitions may be used throughout the Forest to meet management area goals when proper fire prescriptions have been developed and approved by the Forest Supervisor. When prescribed fire-planned ignition is part of a treatment, it will be carried out at a time and within a prescription that will minimize impacts on air quality and soil damage, achieve the desired results, and conform to the Northern Region Fuel Management and Treatment Guides.

b) Management activities that may increase fuel hazards will be analyzed to determine what level of treatment is appropriate. The cleanup or treatment of slash and debris resulting from any project will continue to be considered as a cost of the operation. Projects that cannot provide adequate debris treatment to meet management goals and objectives will not be undertaken. Fire hazards will be reduced by cost-efficient means

See Appendix D and Table D-1 in the Scoping document where excerpts of applicable Forest Plan management area goals, objectives, and standards are described. Fire management standards for management areas within the project area are:

**B: Fire management:** b. Prescribed Fire. Planned ignitions may be used for range improvement and wildlife enhancement, fuels, and debris reduction. Unplanned ignitions may be used to enhance range and wildlife values and restore the natural fire frequency.

**D: Fire management:** b. Prescribed Fire. Planned ignitions may be used for range improvement and wildlife habitat, timber stand maintenance, fuels reduction, sanitation, maintaining vegetation, and associated wildlife habitat dependent on periodic fire. Unplanned ignitions may be used as prescribed fire on National Forest Districts under an approved fire management plan.

**G: Fire Management:** b. Prescribed Fire. Planned ignitions may be used for timber stand maintenance and thinning, slash disposal, natural fuel reduction, wildlife habitat maintenance and enhancement with an approved prescribed fire plan. Unplanned ignitions may be used as prescribed fire to meet management objectives under an approved fire management plan

**M: Fire Management:** b. Prescribed Fire. Planned ignitions may be used for debris cleanup. Operational broadcast burns may be used as a management tool. Unplanned ignitions will not be used as a management tool specific to the management area. Unplanned ignitions will not be used as a management tool specific to the management area. Wildfires entering these areas will receive an appropriate suppression response.

**N: Fire Management:** b. Prescribed Fire. Planned ignitions may be used for wildlife habitat enhancement, and as a vegetative manipulation tool. Unplanned ignitions will not be used as a management tool specific to the management area. Wildfires entering these areas will receive an appropriate suppression response.

**P: Fire Management:** b. Prescribed Fire. Planned ignition may be used for debris disposal and maintenance of administrative pastures. Unplanned ignitions will not be used as a management tool.

**NEC/AWR- EA Comment #13:** The Threemile Project will have significant direct, indirect and cumulative impacts on almost all wildlife species that could inhabit this project area, an impact that requires completion of an environmental impact statement (EIS).

We believe that an EIS needs to be completed for this project, to address the significant direct, indirect and cumulative impacts that will be triggered and/or perpetuated on most wildlife species that may or could occur in this landscape. This landscape has already been impacted by many wild fires, by fuels reduction projects, prescribed burning projects, and forest thinning.

Adding up to almost 8,000 acres of additional impacts will mean that a majority of this landscape will have experienced some type of disturbance within the last 20 years. Although we do not currently have a copy of the project wildlife report, the analysis of wildlife in the EA was completely cursory, and clearly does not measure how all these past and planned actions will impact wildlife. A NEPA analysis needs to provide the basis for conclusions to the public in a NEPA document, which means that the current EA for this project is flawed. There are not even any literature citations provided to support various conclusions. Nor is there a bibliography provided in the EA. These problems clearly indicate a better quality NEPA analysis is required, including an analysis that identifies the huge planned loss of wildlife habitat in the project area. Since the function of an EA is to determine whether or not significant impacts will occur, in which case an EIS would be required, the current EA for the Threemile project is clearly deficient as most adverse impacts to wildlife were not ever identified or evaluated. Without a valid analysis, this EA could not possibly determine if significant adverse impacts to wildlife would be triggered by the proposed project.

**Forest Service Response:** As discussed in the draft Decision Notice and FONSI (draft DN/FONSI), Alternative B is responsive to meeting the objectives identified in purpose and need for the project (draft DN/FONSI). Alternative B is consistent with the Custer National Forest

Land and Resource Management Plan (1986), and the Responsible Official has found that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared, nor is an amendment to the Forest Plan needed. (draft DN/FONSI at pages 11 and 18). Also see the Forest Service Response: to comment NEC/AWR Scoping comment #9, regarding whether a Forest Plan amendment was needed.- Effects were analyzed for T&E, Forest Service Sensitive, Habitat Indicator, Key, Montana Species of Concern, and Birds of conservation concern. While a mixture of effects were seen across these diverse species both positive and negative effects were seen. While some management activities will negatively affect individual species within the project area, these effects are not expected to be so severe or so widespread that populations of species will be affected. Most negative effects will be reduced within 10-40 years as trees return. Overall project activities will alter wildlife habitat but these changes are not outside the natural range of variation. (Wildlife Analysis 1-50)

Also see Forest Service Response to NEC/AWR Scoping Comment #9 and NEC/AWR EA Comments #5 and #12, above.